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# Parental expectancy and correlates of hypnotic and nonhypnotic suggestibility in a sample of Puerto Rican children.

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# PARENTAL EXPECTANCY AND CORRELATES OF HYPNOTIC AND NONHYPNOTIC SUGGESTIBILITY IN A SAMPLE OF PUERTO RICAN CHILDREN

A Dissertation Presented

by

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DEDICATION

To Laura

May your dreams also come true.

And to those rare true friends, who force you to enjoy life,
and help you laugh at its many absurdities.

"When reality is destruction and chaos, art should help to build a new faith,
out of a new weak but genuine hope"

Ernesto Sábato

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## ABSTRACT

PARENTAL EXPECTANCY AND CORRELATES OF

HYPNOTIC AND NONHYPNOTIC SUGGESTIBILITY

IN A SAMPLE OF PUERTO RICAN CHILDREN

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The clinical uses of hypnosis with children have been well documented in increasing numbers in the scientific literature. Past research have suggested a link between the capacity for absorption in fantasy and imaginative involvement, and the capacity to respond to hypnotic suggestions in adulthood. In the case of the uses of hypnotherapy with children, imaginative involvement has played a central role in attempting to predict which children would benefit from hypnosis as part of a therapeutic intervention.

Recent research on hypnotic responding with adults have shown that expectancy about hypnotic responding do have an effect on responses to hypnotic suggestions. Expectancy has been proved to be an important situational factor that affects the subject's response to hypnotic suggestions.

There were two purposes for this study; one was to assess various correlates of imaginative suggestibility in children while controlling for waking suggestibility. This

replicated the study of Poulsen (2000) in which he investigated selected correlates of imaginative suggestibility in a sample of children from a clinical population, and determined to what extent children's responsiveness was due to waking suggestibility and how much was due to hypnotic suggestibility. The second purpose was to explore if there is a relationship between parents' expectancies of their children's responses to suggestibility and the actual responses of their children. The correlates chosen for this investigation were dissociative behavior, fantasy behavior, imaginative involvement, and parental expectancies. All have been critical in better understanding of what personality, behavioral and attitudinal characteristics predict hypnotic suggestibility in children. As predicted, vividness was significantly associated with both nonhypnotic and hypnotic suggestibility. Contrary to what was predicted, absorption did not corrrelate significantly with nonhypnotic suggestibility but did evidence a strong correlation with hypnotic suggestibility. Also contrary to what had been predicted, neither fantasy nor dissociation showed significant correlations with nonhypnotic or hypnotic suggestibility. As expected, parental expectancies did increased with hypnotic suggestibility, but they were not significantly associated with imaginative suggestibility (with and without induction) of the children. Nonhypnotic suggestibility accounted for most of the variance in hypnotizability. A significant correlation was found between nonhypnotic and hypnotic suggestibility, but none of the imaginative suggestibility variables were found to predict unique variance in hypnotizability when nonhypnotic suggestibility was controlled. Absorption and vividness accounted for 27% of the variance in hypnotizability, but did not obtained statistical significance. Similar to previous research, results of this study support the view of hypnotic responsiveness as reflecting a continuum of suggestibility.

Finally, the implications of context and cultural differences when assessing nonhypnotic and hypnotic suggestibility in native Spanish-speaking children are discussed.

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# CHAPTER I

# INTRODUCTION

## Overview of the Problem

The clinical uses of hypnosis with children have been well documented in increasing numbers in the scientific literature for the past 30 years. As many researchers have noticed (J.R. Hilgard, 1979; Gardner, 1974; LeBaron, Zeltzer, & Fanurik, 1988; Plotnick, Payne, & O'Grady, 1991, Poulsen, 2000) children can be very responsive to hypnosis and therefore, good candidates for hypnotherapy due to their natural tendency in their development for a growing use of imagination and fantasy behavior. This is evident in their capacity for imaginative involvement (Hilgard, 1979), where they can be absorbed in daydreaming, fantasy, or be involved in pretend games, imaginary friends, or have unusual abilities to visualize images.

Several investigators have suggested a link between the capacity for absorption in fantasy or imaginative involvement, and the capacity to respond to hypnotic suggestions in adulthood (Bowers, 1978; Hilgard, 1979; Tellegen & Atkinson, 1974; Wilson & Barber, 1983). A predisposition toward imaginative involvement has also been described as representing a "fantasy prone personality" (Wilson & Barber, 1983). Most of these investigators acknowledge that the relationship between the capacity for imaginative involvement and hypnotic ability is not a simple or strong one. Nevertheless, these results do comprise a consistent pattern of evidence, at least in the realm of adult research on hypnotizability.

In the specific case of hypnotherapy with children, imaginative involvement has played a central role. That is why clinicians and researchers, through research into the correlates of imaginative involvement, have sought methods for predicting which children may benefit most from hypnotherapy. Since highly hypnotizable children seem to be also highly imaginative, the investigation of imagery and fantasy correlates of hypnotizability is a logical step in the search to find better ways for the application of hypnosis as a clinical tool with children (LeBaron, Zeltzer, & Fanurik, 1988, Poulsen, 2000).

The issue of hypnotizability in children

The question of degrees of hypnotizability in children is not new. In the 1880's Lie'bat (Tinterow, 1970) struggled with it in his studies of hypnotizability that included subjects from early childhood to over 60 years of age. In the 1930s, Hull (Olness & Kohen, 1996) and his students researched children's responses to waking suggestibility items. Although they did not equate suggestibility with hypnotizability, the two traits were positively correlated.

The results of the early studies were quite similar to those of more recent ones. That is, early research concluded that hypnotizability and suggestibility are quite limited in young children, with an increase in the middle childhood years from about 7 to 14, and then a somewhat small decrease in adolescence. Hypnotizabiity and suggestibility become quite stable throughout early and mid-adulthood, and then tails off again in the older population.

At first glance, the results of the research seem consistent with the research about hypnotizability in children and its variations throughout development. However, these findings contradict a growing body of clinical data indicating that children of preschool age, and perhaps even younger, do in fact respond positively to what is described as the therapeutic use of hypnosis (Olness & Kohen, 1996).

An important fact to consider when dealing with issues of hypnotizability is that not every person responds in the same way to a hypnotic suggestion. The degree of variability for responding to a suggestion could span from few responses to almost all in different persons. Kirsch (1991) as well as Spanos and Hewitt (1980) have emphasized the fact that people's responses to hypnotic suggestions can be influenced by variables like situation/context and expectancy carried in the wording of such suggestions. The way suggestions are worded and the theoretical conceptualization that the hypnotist/experimenter holds about hypnosis do make a significant difference in people's response to a suggestion and the attribution they make of it (Sapnos & Hewitt, 1980).

A problem with the definition of hypnotizability becomes apparent when reviewing the vast literature of research in hypnosis, and the area of hypnotherapy with children is no exception. Even in the most recent comprehensive book on pediatric hypnosis; Hypnosis and Hypnotherapy with Children (Olness & Kohen, 1996) the authors devoted a whole chapter to norms of hypnotizability in children without providing a clear and precise definition of the concept.

A clearer definition was presented by Kirsch (1997). He defined hypnotizability as the change in suggestibility produced by a hypnotic induction, while defining hypnotic suggestibility as the response to a suggestion following a hypnotic induction. This distinction is very important because past research has measured hypnotizability without considering it may be confounded with nonhypnotic (normal walking) suggestibility of research subjects.

In the present study, the empirical distinction between waking and hypnotic suggestibility is made. Hypnotic suggestibility refers to the difference between waking and hypnotic suggestibility as measured by a hypnotizability scale. This distinction provides a framework to assess the correlation of variables like fantasy and imagery with hypnotic and nonhypnotic (waking) suggestibility.

The normative studies with children

London (1962) developed the Children's Hypnotic Susceptibility Scale (CHSS) based on the Stanford Hypnotic Susceptibility Scale (SHSS, Weitzenhoffer & Hilgard, 1959) with an initial pilot study of 21 children, mostly from the upper middle class. The instrument consisted of a 22-item scale, which was intended to be used in children from 5 to 16 years of age and took from 45 to 60 minutes to be administered.

The interscorer reliability of the scale ranged from +. 90 to + .96, with a retest reliability of + .92. Two scoring systems were simultaneously employed, one measuring behavior, the other measuring subjective involvement.

In the sample of 36 children, the author found a "suspected" curvilinear relationship of age and susceptibility ($r = .22$, Beta = .37, $F = .78$, $p > .05$).

London speculated that such curvilinear relationship of age and susceptibility might have been a function of confusing differential simulation ability (in younger children) and motivation with hypnotic behavior. This relationship between age and hypnotic susceptibility was more apparent between the ages of 9-13 years.

London (1962) acknowledged the problems of the small and skewed sample of children that was not statistically representative. He also noted methodological problems, especially the lack of an operational definition of susceptibility. Later, London (1965) standardized the CHSS on a sample of 240 more normally distributed children. Again, he found a small curvilinear relationship between age and suggestibility, with the peak between the ages of 9-12. However, the study also showed that there was more variability within single age groups than between ages.

Morgan and Hilgard (1979) created the Stanford Hypnotic Clinical Scale for Children (SHCS-C) at Stanford University during the 1970's. The scale was constructed for the measurement of hypnotic responsiveness in children with norms provided by testing normal children ages 3 to 16. The test, as constructed correlated .67 with the Stanford Hypnotic Susceptibility Scale for Adults (SHSS: A) but its wording was modified to be appropriate for use with children. The scale was designed for clinical use, and consisted of six (6) items: hand lowering, arm rigidity, visual and auditory hallucinations, dream and age regression. The performance on each scale is scored positive (+) or negative (-) for the occurrence or absence of it, respectively. The Stanford Hypnotic Susceptibility Scale for Children (SHSC) is the most widely used hypnotic scale for children in clinical and experimental settings in the United States.

Suggestibility and hypnotizability in hypnotic and nonhypnotic contexts

Hypnotizability is not the same thing as suggestibility. Hypnotizability is the change in suggestibility produced by inducing hypnosis (Kirsch & Braffman, 1999; Poulsen, 2000). However, almost all studies purporting to measure hypnotizability have neglected to control for nonhypnotic suggestibility, confounding waking with hypnotic suggestibility (Kirsch, 1996). Past research has not taken into account the normal, waking suggestibility of hypnosis subjects, despite the fact that this baseline suggestibility seems to account for most of the variance in hypnotic suggestibility (Kirsch, 1996; Kirsch & Braffman, 1999).

This represents a problem for the research on hypnotic suggestibility with children's population. Up to the present, there has been only one study addressing this issue (Poulsen 2000). Poulsen (2000) conducted a study to assess correlates of imaginative suggestibility in children within a hypnotic and nonhypnotic context. The study conducted by Poulsen (2000) studied selected correlates of imaginative suggestibility in children while exploring the effect of waking and hypnotic suggestibility on children's responsiveness to imaginative suggestibility.

Expectancy and hypnotizability

Response expectancies, that is, the subject's expectancy for the occurrence of behaviors perceived as being involuntary, are major determinants of hypnotic responses. Hypnotic inductions are thus seen as potent measures for increasing response expectations for hypnotic behaviors (Kirsch, 1985; Council et al., 1983).

According to the social-psychological theory of hypnosis, hypnotic responses can be modified through situational determinants like test demand characteristics (Spanos & Coe, 1992) and response expectancies (Kirsch, 1990; Kirsch & Council, 1989).

Expectancies for changes in subjective experience can have a direct (i.e. unmediated) corresponding effect on experience. Thus, strong expectancies for being able to experience hypnotic responses can produce those experiences, in much the same way that placebos can produce changes in pain, anxiety, depression, tension, and other subjective states (Silva & Kirsch, 1992).

Kirsch (1985) hypothesized that hypnotic responses are elicited by the person's expectancy of their occurrence. People expect and therefore experience hypnotic responses to the extent that they believe the response to be appropriate to the role of a hypnotized subject, judge the situation to be one in which hypnotic behavior should occur, and judge themselves to be good hypnotic subjects.

Council et al. (1983) found that scores on an Absorption Scale were more strongly related to hypnotic response expectancies than to actual responses to hypnotic suggestions, and that expectancy was the best predictor of hypnotic responsivity. They reported correlations that accounted for approximately 35% of the variance when subjects predicted their responses to specific suggestions after hearing detailed rationales for hypnotic procedures.

In another study Council et al. (1986) tested the hypothesis that trance inductions alter subject's hypnotic response expectancies, and that these altered expectancies are closely related to subsequent responses to hypnotic suggestions.

These results were consistent with the hypothesis that self-activated changes affect hypnotic responses by virtue of their impact on expectancy and that the relation between absorption scores and hypnotic responding is due to reactive effects of administering the scale in a hypnotic context.

In a more recent study Braffman and Kirsch (1999) investigated hypnotic and nonhypnotic suggestibility in two experiments. In the first experiment, the authors examined the effect of a hypnotic induction on responses to the types of suggestion typically used to assess hypnotic responses, the relationship of suggestibility to motivation and expectancy and, if motivation and expectancy mediate the effect of induction on suggestibility.

Significant correlations have also been reported between subject's predictions of their hypnotizability and their subsequent responsiveness to suggestion (Council et al. 1983; 1986), with some of them accounting for much of the variability in hypnotic responsiveness (Council et al., 1983; Council et al., 1985; Kirsch , 1991). Hypnotic response expectancy has been significantly correlated with absorption (Council et al., 1983) and fantasy proneness (Silva, 1990).

Children, parents, suggestibility and expectancy

Since expectancies about hypnotic responding do have an effect on subjects' responses to hypnotic suggestion, the importance of exploring the effect of parent's expectancies about their children's responses to hypnotic suggestion seems almost intuitive. From a systems theory perspective this makes perfect sense.

That is, the expectancies of parents regarding their children's behavior do have an effect on how they children behave, therefore, it makes sense to suggest parent's expectancies on their children's responsiveness to suggestions (with and without hypnosis) could influence how their children respond to such suggestions.

There has not been any study on this area yet. Nevertheless, in a very recent study regarding correlates of imaginative suggestibility and hypnotizability with children Poulsen (2000), argued about the need to explore situational as well as contextual factors as important variables in the prediction of hypnotic behavior in children.

Several authors have stressed the importance of including parents (or significant others) in the planning and/or intervention with a child client when using hypnotherapeutic methods. This is particularly relevant when dealing with younger children or with children with severe, chronic or disabling illnesses (Zeltzer, & LeBaron, 1982; Matthews, Davis & Stainitis, 1985; Smith, Barabasz & Barabasz, 1996).

Researchers such as Olness and Gardner (1978), Call (1976), and Cooper and London (1976) have written about the importance and relevance of including parents' beliefs, expectations and needs as a central part of the process of developing and/or delivering a successfull hypnotic intervention with children. This perspective is very clear and consistent in much of the clinical case reports in professional journals. However, when it comes to scientific research about this matter, the empirical evidence appears to be non-existent. At the present time, there is no research exploring the parents' effect on the use of hypnotic procedures with children.

Following this line of thought, it could be assumed that parental response expectancies could have an effect on their children's suggestibility and responses to hypnotic suggestions. Clinicians doing hypnotherapy with children have asumed the importance of the parental figure to define a therapeutic contract in which to involved the child and the parent for a succesful intervention (Call, 1976). For instance, Call (1976) proposed that with pediatric leukemia patients, hypnosis apparently provide a method by which both parent and child could participate in the control of certain painful and debilitating symptoms as vomiting and bone pain.

LaBaw and LaBaw (1990) as well as Olness and Kohen (1996) support the notion of the importance of the parent-child interaction (or significant adult) for a succesful hypnotherapeutic intervention with children. Even those parents that are initially reluctant to the use of hypnosis can be help to shift to a more positive stance and therefore, move from being obstacles to becoming allies in their children's treatment (Olness & Kohen, 1996).

In a broader non-clinical perspective, Taylor and Carlson (2000) have written about how do parental attitudes affect child fantasy behavior. They argue that parental attitudes regarding their children's fantasy influence the actual play behavior in young children, as well as children's own interpretations of their imaginative experiences. Parental support and encouragement promote children's engagement in fantasy. Adults can promote imagination in their children by treating children's inventions with delight and respect and by providing children with time, a place, and simple props to stimulate their pretend play (Taylor & Carson, 2000).

In the context of hypnosis with children and the imaginative involvement required how parental expectancies influence their children's responses to suggestion and what effect they could have in an intervention using hypnosis becomes an important issue that needs to be investigated.

Purpose of the study

There are two purposes for this study; one is to assess various correlates of imaginative suggestibility in children while controlling for waking suggestibility. This would replicate the study of Poulsen (2000) in which he investigated selected correlates of imaginative suggestibility in a sample of children from a clinical population, and determined to what extent children's responsiveness was due to walking suggestibility and how much was due to hypnotic suggestibility. The second purpose of the study would be to explore if there is a relationship between children's' suggestibility and their parents' expectancies of their children's responses to hypnosis.

The correlates chosen for this investigation were dissociative behavior, fantasy behavior, imaginative involvement, and parental expectations. Fantasy proneness, imaginative involvement and dissociation were chosen as the same correlates utilized in a previous research by Poulsen (2000). The inclusion of parental expectancies as a possible correlate of suggestibility was a modification of a study by Braffman and Kirsch (1999) with adults, where the researchers found that subject's own expectancies about hypnosis did predict their responses to hypnotic suggestions. Research by Braffman and Kirsch (1999) and Poulsen (2000) have shown that all these variables are critical in better understanding of what personality, behavioral and attitudinal characteristics predict hypnotic suggestibility.

The study will address the following questions:

(1) Within a nonhypnotic context (without an induction), is there a significant relationship between imaginative suggestibility variables like absorption, vividness and fantasy proneness? Within a hypnotic context (with an induction), is there a significant relationship between imaginative suggestibility and the imagery/fantasy variables listed above?

(2) Is there a significant positive relationship between parental reports of their children's dissociative behavior and hypnotic suggestibility?

(3) Is there a significant positive relationship between parental response expectancies about hypnotic suggestibility in their children and their children's actual hypnotic suggestibility?

(4) Is there a significant positive relationship between parental response expectancies of their children's responses to nonhypnotic suggestibility and the children's' actual responses to nonhypnotic suggestibility?

## Definitions

The terminology used in this study is consistent with the more contemporary research in hypnosis, namely, that of Braffman and Kirsch (1999) and Poulsen (2000).

Hypnosis. There is general agreement about the kinds of phenomena observed in what has been termed the *domain of hypnosis* (Hilgard, 1973). Hypnosis is defined as a situation or set of procedures in which a person designated as the client, or subject experience various changes in sensation, perception, cognition, or control over motor behavior (Kirsch, Lynn, & Rhue, 1993). This set of procedures are divided in the

behavior (Kirsch, Lynn, & Rhue, 1993). This set of procedures are divided in the induction and application phases. Although some responsive subjects report that a hypnotic induction produce an altered state that is much different from the normal (walking) consciousness, most people describe it as a normal state of focused attention (McConkey, 1986). During hypnosis, most people are more responsive to suggestions after an induction than they were before (Hilgard, 1965).

Imaginative Suggestibility. The responsiveness to the type of suggestions typically given in hypnosis has been termed imaginative suggestibility, as is also the type of suggestions used in hypnotic susceptibility scales.

Hypnotic Suggestibility. This term will refer to imaginative suggestibility with a process of hypnotic induction.

Nonhypnotic Suggestibility. This term refers to imaginative suggestibility without a hypnotic induction (i.e., in a nonhypnotic context). As Poulsen (2000) points out, it also refers to the concept of the individuals' normal, baseline suggestibility. In the past, some researchers have referred to this as walking suggestibility, but the term in itself is problematic, since hypnosis is not related to sleep (Kirsch & Lynn, 1995).

Hypnotizability. Hipnotizability is here defined as hypnotic suggestibility, with nonhypnotic suggestibility controlled, as in the study by Braffman and Kirsch (1999) and Poulsen (2000). It is operationalized as the difference in or change of score between nonhypnotic and hypnotic suggestibility.

Hypnotic Response Expectancy. This term is defined as to what degree the parent/guardian will expect his/her child will respond behaviorally and experientially

(subjectively) to the suggestibility scale in a hypnotic context (i.e., with an induction).

Nonhypnotic Response Expectancy. Is defined as to what degree the parent/gardian will expect his/her child to respond behaviorally and experientially (subjectively) to the suggestibility scale in a nonhypnotic context (i.e., without an induction).

## Correlates of Childhood Hypnotic Responsiveness

Assessing the demographic characteristics, cognitive abilities, physiological effects, and personality traits presumed to be associated with hypnotic responsiveness has been one way of studying this area. Olness and Kohen (1996) reviewed the major variables studied and showed how they related to correlates of hypnotic responsiveness. The following is a summary of the most common variables studied as correlates.

### Age.

The consistent findings in the research literature (London, 1963; London, 1965) shows a clear but modest curvilinear relationship, showing a peak of suggestibility from 8 to 12 years of age. In his study standardizing the Children's Hypnotic Susceptibility Scale (CHSS) (London, 1963), he found a modest curvilinear relationship between age and suggestibility with a peak between 9-12 years of age (London, 1965). In respect to sex differences between boys and girls at any age, Moore and Lauer (1963) found no sex differences in hypnotic susceptibility when they administered the Stanford Hypnotic Susceptibility Scale (SHSS) to a sample of 48 children from 6 to 12 years of age. Later, Cooper and London (1966) obtained similar results of no sex differences for hypnotic

susceptibility when they administered the Children's Hypnotic Susceptibility Scale (CHSS) (London, 1963) to 240 children of both sexes from 5 to 16 years of age.

Genetics.

Morgan (1973) studied 140 pairs of twins and their parents to explore the heritability of hypnotic susceptibility using the Stanford Hypnotic Susceptibility Scale (SHSS) (Weitzenhoffer & Hilgard, 1959) with subjects ranging from 5 to 22 years of age. She found that the correlation for monozigotic twins was statistically significant both for males (r =. 54) and females (r = .49). In addition, correlation for bi-zygotic twins and for sibling non-twin pairs were not different from zero (r = .08), and the correlation for monozygotic pairs (r = .52) was significantly higher than the correlation for like-sexed bi-zygotic pairs (r = .18). The computed heritability index was .64. These data suggest a genetic contribution to hypnotic susceptibility in combination with environmental factors (Morgan, 1973). This study has not been duplicated, nor any other study regarding the genetic component is listed in the recent research literature. However, Olness and Kohen (1996) believe that there might be a genetic contribution, but they do not provide additional research to support this view.

Cognitive Development.

London (1963) found a positive but modest correlation (r = .43) between Intelligence Quotient (IQ) scores (with full scales and Vocabulary sub-test) on the Weschler Intelligence Scale for Children (WISC) and hypnotizability scores on the Children Hypnotic Suggestibility Scale (CHSS) in a sample of 42 children, ages 8 to 12 years. In another study, Jacobs and Jacobs (1966) studied hypnotizability of 64 children,

ages 4 to 17, who were referred due to poor academic achievement associated with brain injury, mental retardation, delinquency, behavior disorders, and psychoses. There are serious methodological weaknesses are important to consider in this study. First, the researchers did not use any standardized scale of hypnotizability or performed any test of statistical significance. Another problem was the heterogeneity of complex disorders in the sample, which adds to many uncontrolled variables and limits the possibility of drawing any serious conclusions from the results.

Electroencephalographic patterns and Control of Peripheral Skin Temperature.

Cooper and London (1976) studied the relationship between electroencephalographic (EEG) patterns and hypnotizability. In a sample of 35 healthy children, ages 7 to 16, they found that hypnotic susceptibility was significantly correlated with alpha duration ($r = .29$) when their eyes were open. Many individuals show alpha activity (or rhythm) when they close their eyes and relax (Rosenzweig & Leiman 1982).

On the other hand, Cooper and London (1976) found that when the children closed their eyes, this relationship vanished ($r = -.09$). They realized that in children, the alpha activity represented an (relatively) alert state of consciousness, and thus should have studied theta waves, which are related with brain activity caracterized by an awake but reduced state of vigilance (Rosenweig & Leiman, 1982). The results of the study were therefore inconclusive.

Dikel and Olness (1980) studied control of peripheral skin temperature (CPST) in children from 5 to 15 years old. They studied three groups, which entailed different conditions. One group utilized hypnotic imagery, another used hypnotic imagery and

biofeedback training, and the third consisted only of biofeedback training (control group). The authors did not find any significant difference between groups regarding peripheral skin control despite the different techniques used. A criticism of the study was that they did not measure for hypnotic responsiveness (for instance, using a scale) so it is not possible to draw any clear conclusions about CPST as a hypnosis correlate. More controlled research is needed in this area.

Absorption, Imaginative Involvement and Fantasy Proneness.

J.L. Hilgard (1970) developed the construct of imaginative involvement as a capacity that is central to hypnotizability. Through extensive interviews and long-term follow ups with a large number of subjects, she and her colleagues identified various childhood experiences related to hypnotic responsiveness: reading absorption, story telling, imaginary companions, involvement in dramatic arts, religious involvement and "adventuresomeness". The work of Singer (1973), regarding daydreaming as a type of fantasy behavior also provided a theoretical model for fantasy activity, as well as a structured interview that could be used to assess fantasy behavior.

LeBaron, Zeltzer, and Fanurik (1988) conducted two pilot studies in an effort to assess hypnotizability in children and the extent of involvement in fantasy-related activities during early childhood. The first study involved 30 pediatric patients aged 6-18 years. Each was given the SHCS-C (Morgan & Hilgard, 1978/79) and a fantasy questionnaire derived from Singer's Imaginative Play Questionnaire (1973). In the second study, 54 healthy children (age 6-12) from a private elementary school were administered the same scales as the first study. In both studies, hypnotizability correlated

moderately (.42 and .39 respectively) with involvement in fantasy-related activities. These two studies lend some partial support for the relationship of hypnotizability with imaginative involvement in childhood.

However, the fact that a brief measurement of fantasy was used and that hypnotic and waking suggestibility were confounded in the use of the SHCS-C, showed that the studies had important methodological weaknesses. It did not take into consideration the normal walking suggestibility of subjects as a baseline measure to later compare it with hypnotic suggestibility (after an induction). That is, measurements of suggestibility (the fantasy-related activities) without a hypnotic context, to later compare it with the difference of those dependent variables after the hypnotic induction. As Kirsch (1996) has stated in the past, traditionally research using hypnotizability measures confounds waking suggestibility (without hypnosis) with hypnotic suggestibility. This is a very important issue, due to the fact that Kirsch (1996) has suggested that baseline suggestibility seems to account for most of the variance in hypnotic suggestibility.

An important study conducted by Plotnick et al. (1991) looked at hypnotizability in children, absorption, vividness of imagery, fantasy play, and social desirability. The following were administered to a sample of 42 children (ages 7-14): the SHCS-R, the Children' Social Desirability Questionnaire (CSDQ), the Fantasy Questionnaire (FQ) used by LeBaron et al. (1988), and the Absorption and Vividness measures from the Children's Fantasy Inventory CFI: A & V) developed by Rosenfeld et.al. (1982). The authors found a significant correlation between each of the fantasy/imagery measures and the SHCS-C-R that ranged from .42 to .53, but no significant correlations were found

between hypnotizability and social desirability.

Weaknesses of the study include the informal process of subject recruiting from the university (because it was easier than securing permission from the schools) and that the parents had access to the SHCS-C-R prior to the administration of the scale. No information was provided regarding if they had any kind of conversation with the children about the scale prior to the experiment. It is possible that parents might have talked with their participating children about the study. If that was the case, that practice may have affected the children's expectations and performance on the scale. The authors mentioned that sharing information with the parents regarding hypnosis and the use of the scale was done in order to dispel any previous misconception about hypnosis. However, they did not present any specific details about what kind of information they shared, neither provided any control for the possible expectancy effect. Another weakness of the study (Plotnick et al., 1991) is that nonhypnotic suggestibility was not controlled, therefore confounding it with hypnotic suggestibility (Kirsch, 1996).

In a more recent study Poulsen (2000) assessed imaginative involvement, fantasy behavior, and dissociative behavior in a sample of 44 children (16 females and 28 males) between the ages of 8 and 15. The study, conducted with a clinical sample, (with a DSM-IV diagnosis) assessed these various correlates of imaginative suggestibility while also controlling for nonhypnotic (waking) suggestibility. Imaginative involvement (Fantasy, Vividness and Absorption) and dissociative behaviors were the correlates investigated in relation to a hypnotic and nonhypnotic context.

The measures utilized for the study were the Stanford Hypnotic Clinical Scale for Children (SHCS-C; Morgan and Hilgard, 1979) to assess imaginative suggestibility; the Absorption and Vividness scales of the Children's Fantasy Inventory (Rosenfeld, Huesmann, Eron, and Torney-Purta, 1982); the Fantasy Questionnaire (LeBaron & Zeltzer, 1988) to assesses past fantasy behavior; and the Child Dissociative Checklist (Putnam, Helmers, & Trickett, 1993) to assess several domains of dissociative behaviors (e.g. amnesia, hallucinations).

The study did not show significant differences between the mean score for nonhypnotic suggestibility (M = 4.30, SD = 1.97) and hypnotic suggestibility (M = 4.93, SD = 1.91) while scores from both conditions were highly correlated (r= .83, p<. 001).

Fantasy, vividness and absorption were all significantly associated with one another (r = .48 - .64, p<. 001). Dissociation and Vocabulary were not correlated with each other or with the imaginative involvement variables. Vividness and Fantasy were significantly associated with nonhypnotic suggestibility ( r = .38, p < .01; r = .51, p < .001 respectively) while Vividness, Fantasy, and Absorption were significantly correlated with hypnotic suggestibility ( r = .50- .52, p <. 001). There were no significant correlations with hypnotic and nonhypnotic suggestibility for the variables Dissociation or Vocabulary.

Regression analysis of Fantasy behavior (Absorption + Vividness, combined) revealed it as a unique predictor of imaginative suggestibility (Beta = .45; p <. 01), reaching statistical significance, F (2,41) = 7.35, p <. 01, accounting for 26% of the variance. Hypnotic suggestibility was regressed on nonhypnotic suggestibility and

Absorption + Vividness to build a model predicting hypnotizability. The model obtained statistical significance in accounting for 76% (75% adjusted) of the variance in hypnotizability : $F(41, 2) = 66.22$, $p < .001$. Nonhypnotic suggestibility (for Fantasy + Vividness combined) accounted for most of the variance (Beta = .73; $p < .001$), while Absorption and Vividness also reached statistical significance (Beta = .28; $p <. 001$) in hypnotizability.

Poulsens' (2000) results provide important information regarding the effect of these correlates of suggestibility both when using a hypnotic or nonhypnotic induction. Since it is the first study of this type with children with a psychiatric diagnosis, it is important to replicate it with a non-clinical population in order to verify these findings. As the author indicates, not only personality correlates are important in studying imaginative correlates in children, but contextual correlates are also important, as in the case of response expectancies (Poulsen, 2000).

Parent-child interaction.

The parents' perceptions, expectancies, attitudes and beliefs about hypnosis can have an effect on the child's responsiveness to an intervention (Olness & Kohen, 1996). However, this has not been the trend in the area of hypnosis research, where the study of this variable has almost been non-existent. Cooper and London (1976) conducted the only study in which parent-child relationships and childhood hypnotizability were studied concurrently. They found that parents of highly hypnotizable subjects tended to rate themselves as more strict, anxious, and impatient than parents of children with low hypnotizability. However, the results were inconclusive, therefore, more research is needed in this area.

Response Expectancy and Suggestibility.

At the present time, there is no research on the literature on response expectancy and suggestibility with children. The need to investigate this area with children has already been exposed in previous sections of this work. As Poulsen (2000) has suggested, there is a clear need to consider both personality and contextual factors as foci for future investigation regarding children and suggestibility, one of these factors being response expectancies to hypnotic and nonhypnotic suggestion.

Stam and Spanos (1980) reported that the efficacy of hypnotic and pain analgesia is a function of the expectations of subjects of the efficacy of each treatment modality. In their study, forty subjects (20 males and 20 females) from 18 to 30 years of age, who scored high on the Harvard Group Scale for Hypnotic Suggestibility (HGSHS: A; Shor & Orne, 1962) were randomly assigned to one of four groups. Each group received three 60-seconds immersions of cold pressor pain stimulation. Immersions were associated with hypnotic analgesia, waking analgesia, or no analgesia (control) instructions. These constituted the three group conditions, which order of occurrence varied across groups.

The first immersion was a baseline trial and was the same for subjects in all groups. The remaining two immersions differed as a function of the group to which subjects were assigned. After the first immersion, the first group was given waking analgesia for the second immersion and hypnotic analgesia for the third one.

The second group instead of receiving hypnotic analgesia received waking analgesia for both the second and third immersions. The third group received hypnotic analgesia for the second immersion and waking analgesia for the third one.

However, before the second immersion they were told that waking analgesia is more effective than hypnotic analgesia. The fourth group served as a no-treatment control. For these subjects the second and third immersions were identical to the baseline immersion.

Two procedures were used for pain scaling in the study. First, subjects were taught to use a magnitude scale procedure whereby they would assign any number that seemed appropriate, in successive numbers that might reflect their subjective impression of pain. Subjects reported their ratings every 5 seconds during the immersion. Immediately after the immersion, each subject was shown a category rating scale with numbers ranging from 0 (no pain) to 10 (excruciating pain), and they would rate the intensity of pain they experienced the moment before they withdrew their arm form their preceding immersion.

A 4 x 3 x 12 split-plot analysis of variance (ANOVA) with one between-subjects variable (4 groups) and two within-subjects variables (3 immersions and 12 duration's in ice water, 5 to 60 sec) was performed on the transformed magnitude estimates. The main effects for trial $F(2, 72) = 35.29$, $p < .001$, and duration, $F(11, 396) = 222.51$, $p < .001$, were significant. The duration's' main effect indicated that magnitude estimates increased systematically from 5 to 60 seconds of immersion. The Group x Immersion interaction was also significant, $F(6, 72) = 6.59$, $p < .001$.

Subjects on group 1 reported a significant drop in pain from baseline to waking analgesia and further significant drop from waking to hypnotic analgesia. Those on group 2 showed a significant reduction in reported pain from baseline to their first waking analgesia immersion, but no further significant decrease between their first and

second waking analgesia immersions. Subjects on group 3 reported significantly less pain on their third immersion (waking analgesia) than during baseline. However, their pain ratings during the second immersion (hypnotic analgesia) did not differ significantly from their baseline or third immersion ratings. Subjects on group 4 (control) reported no significant differences in pain across the three immersions.

The results indicated that subjects who received waking analgesia while anticipating later hypnotic analgesia (group 1) reported more pain than did subjects who received the same waking analgesia suggestion but did not expect later hypnotic analgesia (group 2). Moreover, subjects given negative information before hypnotic analgesia (group 3) reported more pain than waking analgesia subjects who did not anticipate hypnosis (group 2), indicating that subjects who know that they are to be hypnotized refrain from performing maximally during a waking condition in order to enhance their performance during hypnotic testing (Stam & Spanos, 1980).

Stam and Spanos (1980) found hypnotic analgesia to be more effective than, less effective than, or equally effective as waking analgesia, depending on the expectations conveyed to subjects.

In another study Council, Kirsch, and Hafner (1986) explored the idea of the relation between absorption and hypnotic responsiveness as a function of the reactive effects (and its expectation) of administering imaginative involvement scales in hypnotic contexts. The authors administered the Absorption Scale (Tellegen, 1982), a measure of imaginative involvement to 128 subjects (38 females, 90 males) without previous experience of hypnosis. Sixty-four completed the scale in the context of hypnosis

experiment and 64 in a context unrelated to hypnosis, in groups of 6 to 12 participants.

Expectancies of responding to hypnotic suggestions were assessed both before hypnotic induction and after hypnotic induction, but before administration of hypnotic test suggestions. The Absorption sub-scale of the Differential Personality Questionnaire (Tellegen, 1982) was used to measure the independent variable. This is a 37-item, true-false inventory that enables one to assess the propensity to become highly involved in sensory and imaginative experiences in nonhypnotic contexts.

The Hypnotic Depth Prediction Scale (HDPS, Field, 1965) was used as a mediating variable measure. It consisted of 10 self-prediction items followed by 5-point Likert scales ranging from *not at all likely* (1) to *completely certain* (5). Also, the Hypnotic Responsivity Prediction Scale: Preinduction (HRPS-1), a 10-item response expectancy measure that is analogous to those on the dependent measure, the Sanford Group Scale of Hypnotic Susceptibility (SGS: Finke & MacDonald, 1978). Following each item is a 5-point scale, ranging from *very unlikely* (1) to *completely certain* (5), on which subjects indicated the likelihood that they would have that experience if it were suggested during hypnosis.

The Stanford Group Scale of Hypnotic Susceptibility (SGS; Finke & MacDonald, 1978), a group adaptation of the Stanford Hypnotic Susceptibility Scale: Form C (SHSS; C, Weitzenhoffer & Hilgard, 1962) was the primary measure of hypnotic responsivity. The Inventory of Hypnotic Depth (IHD), a 38-item, true-false inventory of unsuggested cognitive and perceptual distortions experienced during hypnosis, was also used as a measure of dependent variables. The sum of endorsements indicated the degree to which

a subject experienced alterations in consciousness during a hypnotic session.

The results of the study (Council et al., 1986) showed that Absorption was significantly correlated with all expectancy measures and with scores on the IHD. The authors found that response to suggestions (SGSB, SGSS) was significantly correlated with preinduction expectancies (HRPS-1), more highly correlated with LSS depth reports and most highly with postinduction expectancies (HRPS-2). Postinduction expectancies also bore significant higher correlations than did preinduction expectancies with SGS behavioral scores, $t\ (125) = 3.85$, $p < .01$, with SGS subjective scores, $t\ (125) = 5.59$, $p < .001$, and with the IHD, $t\ (11) = 4.03$, $p < .001$ on two-tailed probability levels.

Council, Kirsch, and Hafner (1986) concluded from their findings that expectancy had significantly different relations with responsivity to hypnotic test suggestions in the contexts of traditional and nontraditional hypnotic inductions, and by evidence suggesting that correlations between absorption and responsivity are mediated by expectancy.

More recently, Braffman and Kirsch (1999) conducted and important study on imaginative suggestibility and hypnotizability. The authors examined the association between hypnotic and nonhypnotic suggestibility with a large sample of participants while presenting the first empirical assessment of the variables absorption, fantasy proneness, motivation and response expectancy as predictors of nonhypnotic suggestibility and of hypnotic suggestibility with nonhypnotic suggestibility controlled.

Hypnotic and nonhypnotic suggestibility was investigated in 2 experiments. In experiment 1, nonhypnotic suggestibility was suppressed when measured after hypnotic

suggestibility. In experiment 2, absorption, fantasy proneness, response motivation and response expectancy was examined as predictors of nonhypnotic suggestibility, hypnotic suggestibility and hypnotizability.

For this study, Braffman and Kirsch (1999) defined for this study hypnotizability or hypnotic susceptibility as the increase in suggestibility produced by hypnosis. Hypnotic suggestibility was defined as the response to a suggestion after a hypnotic induction.

In the first experiment, 92 subjects (29 male, 63 females) ages 17 to 21 years were administered the Carleton University Responsiveness to Suggestion Scale (CURSS, Spanos, Radtke, Hodgins, Bertrand, & Stam, 1981). The CURSS consists of seven test suggestions. Self-reported behavioral scores were obtained by having participants complete a questionnaire on which they indicate whether they had made the behavioral response called for by the suggestions (0= no; 1= yes). Behavioral responsiveness to suggestions was assessed as the sum of these ratings. Subjective scores on the CURSS were obtained by having participants rate the degree to which they felt the subjective effects called for in each suggestion (e.g. arm rigidity) on a 3-point scale (0= not at all; 3= to a great degree). Subjective responsiveness to suggestions was assessed as the sum of these ratings.

Response expectancy was assessed by providing participants with a written description of each suggestion and asking them to rate on 5-point Likert scales the degree to which they expected to respond behaviorally and experientially (subjectively) to each. For the arm levitation participants were asked to predict how high their arms would rise

(1= not at all; 5= very high) and how light their arms would feel (1= not at all; 5= very light). Hypnotic response expectancy was calculated as the sum of these ratings.

Participants' motivations to experience each suggestion were assessed in a similar way by asking them to also rate on a 5-point scale the degree to which they wanted to experience the suggestions. For the arm levitation suggestion, for example, participants were asked how much they would like to experience their arm feeling light and raising (1= not at all; 5 = very much). Motivation then was also calculated as the sum of these ratings.

An ANOVA analysis (2 x 2; trial x order) was conducted for experiment 1 indicating main effects for trial on all variables: behavioral suggestibility scores, $F(1,90) = 8.00$, $p < .01$; subjective suggestibility scores, $F(1, 20) = 12.83$, $p < .01$; expectancy, $F(1, 90) = 44.37$, $p < .001$; motivation, $F(1, 90) = 17.20$, $p < .001$. The correlations between hypnotic and nonhypnotic suggestibility was .36, $p < .001$, for behavioral and subjective scores was .48, $p < .001$. Correlations between expectancy and motivation, behavior and experience were .37 ($p < .001$), .57 ($p < .001$) and .52 ($< .001$) respectively.

The authors concluded in the first experiment that the results showed that the induction of hypnosis produces a modest enhancement of suggestibility. In the study, nonhypnotic suggestibility was suppressed when measured after hypnotic suggestibility, whereas hypnotic suggestibility was not affected by the order of assessment.

The means and standard deviations of Response to Sugestion; Behavior (behavioral responses to suggestions), Experience (the degree to which participants felt the subjective effects called for in each suggestion), Response Expectancy, and Response

Motivation, as a Function of Hypnotic Induction obtained in the study are presented in the following table.

Means and Standard Deviations for the Braffman and Kirsch (1999) study.

| | Behavior | | Experience | | Motivation | | Expectancy | |
|---|---|---|---|---|---|---|---|---|
| **Order** | N | H | N | H | N | H | N | H |
| **NH** | | | | | | | | |
| **M** | 1.89 | 2.25 | 6.11 | 7.05 | 20.91 | 21.34 | 37.52 | 35.86 |
| **SD** | 1.56 | 1.77 | 3.24 | 4.41 | 5.10 | 7.70 | 10.47 | 12.00 |
| **HN** | | | | | | | | |
| **M** | 0.92 | 2.35 | 2.42 | 6.33 | 20.21 | 26.13 | 28.29 | 43.67 |
| **SD** | 1.41 | 1.79 | 3.31 | 4.58 | 8.37 | 6.84 | 13.34 | 10.48 |

Note. N = nonhypnotic suggestibility; H = hypnotic suggestibility

In experiment 2, absorption, fantasy proneness, response motivation and response expectancy were all examined as predictors of nonhypnotic suggestibility, hypnotic suggestibility and hypnotizability. Assessment of suggestibility, motivation and expectancy was identical as in the first experiment. Participants were 170 undergraduate students (66 males, 104 females) between 17 and 29 years of age.

In this experiment, all participants were given nonhypnotic suggestions first and were then reassessed after the induction of hypnosis. They were not informed that hypnosis would be induced until after nonhypnotic responding had been assessed. All subjects completed absorption and fantasy proneness scales, and the procedures for

assessing motivation; expectancy and suggestibility were identical to those reported for Experiment 1, except that all participants were assessed without induction or mention of hypnosis on the first trial. Hypnotic induction was mentioned and used in Trial 2.

The mean behavioral score for nonhypnotic suggestibility on the Carleton University Responsiveness to Suggestion Scale (CURRS) was 1.99 (SD= 1.56), and the mean behavioral score for the CURSS with a hypnotic induction was 2.52 (SD= 1.92). There was a significant increase in the mean score of suggestibility from the nonhypnotic to the hypnotic condition of .53, $t(169) = 4.71$, $p < .001$, with a correlation between the two scores of .67, $p < .001$. The mean subjective score for nonhypnotic suggestibility was 5.96 (SD= 4.12). With a hypnotic induction, the mean score was 6.85 (SD= 5.10). The mean increase in subjective experience was significant, $t(169) = 4.00$, $p < .001$. The correlation between the two scores was .82, $p < .001$.

There was a significant increase in suggestibility following the induction of hypnosis but only by a minority of participants. Absorption, fantasy proneness, motivation and expectancy were significantly correlated with both nonhypnotic and hypnotic suggestibility, but only motivation and expectancy were significantly associated with hypnotizability. Response expectancy was the only unique predictor of behavioral ($B = .50, p < .001$) and experiential ($B = .50$, $p < .001$) measures of imaginative suggestibility when simultaneous regression analysis of nonhypnotic suggestibility scores on absorption, fantasy proneness, motivation and expectancy were performed.

The results showed that nonhypnotic suggestibility, motivation, and expectancy together accounted for 53% of the variance in hypnotic behavior.

Braffman and Kirsch (1999) concluded that with their results, that as in Experiment 1, suggestibility was predicted by expectancy and motivation, and also predicted by absorption and fantasy proneness while mediated by expectancy.

The association of expectancy with nonhypnotic suggestibility was very strong accounting for 25% of the variance even with other variables controlled. The authors concluded that although hypnotic behavior was strongly predicted by nonhypnotic behavior, it was also predicted by expectancy and motivation, even with nonhypnotic suggestibility controlled (Braffman & Kirsch, 199).

The results of these two studies on the effect of expectancy on hypnotic and nonhypnotic suggestibility are very important and underscore the need of exploring these variables in children.

## Cross-Cultural Differences and Hypnotic Suggestibility

In the field of clinical hypnosis, it has long been assumed that the culture and language of the client have to be taken into consideration in hypnotherapeutic interventions (Olness & Kohen, 1996; Lankto & Lankton, 1983). The psychiatrist Milton H. Erickson, internationally known for his skills in hypnotic intervention, used to say that the therapist must "meet the client at his or her model of the world" in order to be effective in treatment (Lankton & Lankton, 1983).

However, in the field of experimental hypnosis, it has been generally assumed that hypnotizability and imagination are universal traits that are evident, in varying degrees, regardless of the cultural context (and background) within which these attributes

have been examined (Leah, Rhue, Lynn, & Seevaratnam, 1996). It was not until the past 15 years or so that research on hypnotic suggestibility came to examine that assumption (Leah et al, 1996). Most of the research today has supported the cross-cultural validity of hypnotizability using standardized scales (Barnier & McConkey, 1999; Lamas,Valle-Inclan, & Albo, 1996; Leah, Rhue, Lynn, & Seevaratnam, 1996; Zachariae, Jorgensen, & Christensen, 2000).

Kallio and Ihamuotila (1999) conducted a study to develop Finnish norms for the Harvard Group Scale of Hypnotic Susceptibility, Form A (HGSHS: A). Their sample consisted of 285 unpaid university and high school students of both sexes, divided into 3 groups, who were tested over a period of 2 years. The subjects on group one were 129 students (117 females, 12 males), from a nursing school, were recruited using a notice-board advertisement inviting them to a group hypnosis session. The second group consisted of 116 university students (99 females, 17 males), enrolled in an introductory psychology course. Participation was a course requirement for the students, and consisted of 3 hours during which they were administered a variety of psychological tests. They were also offered the option of participating in a "group hypnosis session" (Kallio & Ihamuotila, 1999). The third group consisted of 40 students (29 females, 11 males), who were either enrolled in a sports massage school or were high school seniors. They were also previously informed that a group hypnosis session would take place during their following psychology class and that their participation was entirely voluntary. The combination of samples gave an aggregate sample of 285 subjects, 245 females (86%) and 40 males (14%).

Kallio and Ihamuotila (1999) reported that although there were some variations in the meaning of some items, a result of the translation of the scale, nevertheless, their results with the Finnish norms for the HGSHS:A were congruent with those of similar studies with normative data for hypnotic scales in Danish (Zachariae, Sommerlund, & Molay, 1999), Spanish (Lamas, Del Valle-Inclan, Blanco, & Diaz, 1996), and the original work of the HGSHS:A by Shor and Orne (1962).

Zachariae, Jorgensen, and Christensen (2000) tested the validity of a Danish translation of the Tellegen Absorption Scale (TAS) (Tellegen, 1982) by investigating the correlation between scores on the TAS and a previously validated Danish translation of the Harvard Group Scale of Hypnotic Susceptibility (HGSHS: A) (Shor & Orne, 1963) in a sample of 168 adult subjects. In their study, the authors found comparable mean scores for the TAS and the HGSHS: A to those found in samples from studies in the United States. Mean scores of 19.5 (SD = 6.1) and 20.8 (SD = 7.0), for two groups, were comparable to mean scores found in U.S. samples of 20.0 (SD = 5.8) and 20.6 (SD = 6.8) in a study by Glisky, Tataryn, Tobias, Kihstrom, and McConkey (1991).

The Zachariae et al (2000) study also found a significant relationship between absorption and hypnotizability, when absorption was assessed in the hypnotic context. A significant association was also found when absorption and hypnotizability were assessed independently.

De Pascalis, Bellusci, and Russo (2000) conducted a study to develop norms for an Italian translation of the Stanford Hypnotic Susceptibility Scale, Form C (SHSS: C, Weitzenhoffer & Hilgard, 1962), in a sample of adult subjects. The SHSS: C was

administered to 356 native Italian-speaking psychology students, 263 women and 93 men, ages 19 to 29 years. The participants were volunteers, recruited from introductory psychology courses in the Faculty of Psychology, at the La Sapienza University of Rome, over a period of 15 consecutive years. The subjects were not required to participate in the hypnosis study as part of a course, and they did not receive course credit in return for their participation. Of these 36 volunteers, 218 had received the Harvard Group Scale of Hypnotic Susceptibility (HGSHS: A, Shor & Orne, 1963) within the 3 weeks prior to the administration of the SHSS: C. Of this group, 138 subjects were administered only the SHSS: C.

The mean SHSS: C score for the 281 subjects who had received the HGSHS: A was 6.92 (SD = 3.04). The mean SHSS: C for the 138 subjects who received only the SHSS: C was 6.65 (SD = 6.65). The authors found no significant differences between these two means, nor did they find gender differences in the scores for the total sample. However, the mean score of the Italian sample (M = 6.81) was found to be significantly higher than mean scores reported for Spanish by Lamas et al (1996) of 5.78, $t(469) = 3.11$, $p < .01$ and the Shor and Orne (1963) normative American sample of 5.07, $t(557) = 6.46$, $p < .001$.

De Pascalis et al (2000) reported in their study that the differences in the normative data on the SHSS: C for the Italian sample from that of the American sample (Shor & Orne, 1963) could have resulted from using data from 218 subjects who were willing to return for a second hypnosis session. This could have inflated the overall score results. Whatever the differences in responses to the scale, both samples behaved in

similar ways. The authors concluded that the Italian version of the SHSS: C is a valid tool for hypnosis research, even with the subtle differences in the profiles of response (De Pascalis et al, 2000).

More recently, Naring, Roelofs, and Hoogduin (2001) conducted a study to develop norms for the Dutch language version of the SHSS: C (Weitzenhoffer & Hilgard, 1962). Subjects were 135 undergraduate students from a Dutch university, all of them voluntary participants who did not know that the study involved experiencing hypnosis. For the study, the SHSS: C was translated into Dutch, and a native English speaker examined the translation.

Results from the study showed a mean score for the SHSS: C of 4.31 (SD = 2.60), which was significantly lower than the mean Score of 5.19 for the Hilgard (1965) sample, SD = 3.09, $z = 3.72$, $p < .001$. No subjects in the Dutch sample scored 11 or 12 (the high end of the scale) and only 5 subjects were given a score of 10. Despite the relatively low scores for the SHSS: C in this study, the authors concluded that the scale appears to have psychometric properties comparable with those of other versions of the scale (Naring et al, 2001). However, they mention the possibility that the lower scores could arise from the fact that the Dutch translation deviates subtly from those of other languages in tone and content, despite the careful translation process. Finally, they recommended caution in generalizing their results and pointed out the need for more research with their translated SHSS: C scale.

Lamas et al (1996) studied the norms of a Spanish version of the Stanford Hypnotic Susceptibility Scale, Form C (SHSS-C) for adults. In the study, 115 normal

undergraduate students (male and female) participated, whose mean age was 19.5 years. The authors reported that the mean scores, score distribution, item difficulty, reliability, and validity obtained with the Spanish version of the SHSS-C were similar to that of the original American sample (Shor & Orne, 1963).

To date, no research has been done with Spanish-speaking children, in or outside the United States, with a Spanish version of the Stanford Hypnotic Clinical Scale for Children (SHCS-C). Research with the SHCS-C in the United States has included only a handful of Hispanic children, whose primary language was English. For instance, LeBaron and Zeltzer (1988) reported 16 (53%) Hispanic children participating in their study using the SHCS-C. Plotnick, Payne, and O'Grady (1991a, 1991b) did not include Hispanic or Spanish-speaking children in their important studies, exploring correlates of hypnotizability in children and revising the SHCS-C, respectively. Only recently has Poulsen (2000) reported including 2 (5%) Hispanic, English-speaking children in his study of correlates of imaginative involvement and hypnotizability in children.

It is obvious that non-English-speaking children are underrepresented in the research on hypnotic suggestibility in the United States. What is more, as already mentioned, the total absence of research in this area with Spanish-speaking children makes the need to explore this population all the more important, to find out how useful a hypnotizability scale like the SHCS-C can be in cross-cultural contexts.

## Research Questions and Hypotheses

The present study intended to investigate the following questions and hypotheses:

Question 1

Within a nonhypnotic context (i.e., without an induction), is there a significant relationship between imaginative suggestibility and imagery and fantasy variables like absorption, vividness, and fantasy proneness? Within a hypnotic context (i.e., with an induction), is there a significant relationship between imaginative suggestibility and the imagery/fantasy variables listed above?

The hypothesis is that waking suggestibility would correlate significantly with the imagery variables, just as past measures of hypnotizability have. A related hypothesis is that the correlations between waking suggestibility and imagery variables would be higher than the correlations between hypnotic suggestibility and imagery variables.

Question 2

Is there a significant positive relationship between parental reports of dissociative behavior and hypnotizability?

The hypothesis is that dissociative behavior, imaginative involvement and nonhypnotic suggestibility will all significantly predict hypnotizability.

Question 3

Is there a significant positive relationship between parental expectations about hypnosis and hypnotic suggestibility on their children responses to suggestions?

Is there also a significant relationship with nonhypnotic suggestibility and their children's responses to suggestions?

The hypothesis is that parental expectations about hypnosis would have a significant positive relationship with both hypnotic and nonhypnotic suggestibility of their children responses to suggestions.

# CHAPTER II

# METHOD

## Design

A within-subjects experimental design was used for this study. This permitted subjects to act as their own controls. Subjects experienced two experimental conditions sequentially, which constituted the two independent variables (hypnotic condition and non-hypnotic condition). Dependent variables consisted of scores from the hypnotizability scale, imagery and vividness measures, the fantasy questionnaire, and dissociation measures, as well as expectancy measures of the parents of the subjects. Each subject experienced both conditions and was given each of the instruments, without counterbalancing. The parents were given a Likert-type scale to measure their expectations of their children's performance on the hypnotizability scale, with and without the induction of hypnosis in their children.

The procedures were not counterbalanced, as it is typically required in repeated-measures designs. There were 2 reasons for this: first, in a series of two recent studies (Braffman and Kirsch, 1999), counterbalanced procedures were employed in one experiment and not in the other. Results of the counterbalanced experiment indicated that prior assessment inhibited non-hypnotic responding, but did not significantly affect hypnotic responding. In other words, the order of administration did not affect responsiveness in the hypnotic condition but it did affect responding in non-hypnotic suggestion (when the non-hypnotic condition was experienced after the hypnotic

condition). The second reason for not counterbalancing the procedures was that, as in the investigation conducted by Poulsen (2000), a central concern in the present research has been to examine how non-hypnotic suggestibility and other variables predict hypnotic suggestibility. Counterbalancing procedures would have defeated the purpose of studying hypnotic versus non-hypnotic suggestibility. Finally, the experimenter and a research assistant, who is a doctoral psychology student trained in clinical hypnosis, were the investigators for this study.

## Subjects

A total of 102 subjects (51 children and 51 parents) were included in the final data analysis. Twenty-nine females and 22 males between the ages of 8 and 15 (M = 11.27; SD = 2.58) made up the children's sample, while 39 females and 12 males between the ages of 28 and 60 (M = 39.52; SD = 6.75) made up the parents' group. All the children and parents were native Spanish-speaking. All children were native-born Puerto Ricans, and 40 (78.4%) of them had Puerto Rican parents, while 11(21.6%) had at least one parent from Cuba, the Dominican Republic, or Mexico.

This age group is the one studied by Poulsen (2000) and had also been studied previously in similar projects (Plotnick, Payne, & O'Grady, 1991; LeBaron, Zeltzer, & Fanurik, 1988). And this appears to be the developmental period when suggestibility is heightened (Barber & Calverly, 1963; London, 1965; Morgan and Hilgard, 1979). General demographic information was collected for all of the children, including gender, age, number of siblings, and birth order in the family. Information regarding gender, age,

marital status, and level of education (in years) was collected for the participating parents/guardians.

In contrast to Poulsen (2000), this study did not use a clinical sample. Children with a clinical diagnosis (DSM-IV), who at the time of the study were receiving psychological/psychiatric treatment, were excluded from the sample. None of the participating children had ever been admitted to a psychiatric hospital for treatment.

All the children and parents/guardians who participated in the study where native Spanish-speakers. At present, there is no normative data for Spanish-speaking children for any of the measures that were used in the study.

Thirty-seven children (72.5%) were from the San Juan metropolitan area, while 14 (27.5%) were from the North East, North Central, Central, South, or South West regions of the island. Table 2 shows the distribution of children by geographical area.

Table 1.

Frequency Distribution of Children by Geographic Area.

| Geographic Area | Frequency | Percent |
|---|---|---|
| San Juan/Metro | 36 | 70.6 |
| North East | 3 | 5.9 |
| North Central | 2 | 3.9 |
| Central | 1 | 2.0 |
| South | 4 | 7.8 |
| South West | 5 | 9.8 |

Different sources -- private schools, physicians' offices, community organizations (i.e., Boy Scout and Girl Scout troops), and the pastors of various churches were contacted to ask for volunteers to participate in the study. This procedure was similar to the one used by Cooper (1976) in his study of hypnotic susceptibility of children from non-clinical populations.

Once the contact was made, the study was explained to the contact person in the above-mentioned agencies organizations. Their cooperation was requested in the form of suggestions of names of families which might be interested in participating in the study. A form letter was sent to the parents, briefly explaining the study as one involving measurement of imagination, suggestion, and hypnosis in children. Once a parent and child had participated in the study, they were asked to suggest other potential candidates for the study, but without commenting on the nature of the study. This was done to create a possible "snowball effect" to enhance the process of recruiting subjects.

## Measures

### The Stanford Hypnotic Clinical Scale for Children (SHCS-C)

This scale, developed by Morgan and J.R. Hilgard (1979), was used to assess suggestibility. It was administered twice for each child, with and without induction. The scale is intended for children age 6 to 16. The SHCS-C is constructed of 7 tasks including hand lowering suggestion, the arm rigidity task, visual and auditory hallucination suggestions, and dream suggestion. The scale can be administered in 20 minutes and yields one observer behavior score. The SHCS-C correlated .67 with the longer Stanford

Hypnotic Suggestibility Scale, Form A (SHSS-A) with a reported high test-retest reliability.

The SHSS-C was translated into Spanish by the experimenter and was given to a Spanish-speaking psychologist for verification and further correction.

The Fantasy Questionnaire

This scale developed by LeBaron and Zeltzer (1988) was used to assess a child's past fantasy behavior. The Fantasy Questionnaire (FQ) is derived from Singer's Imaginative Play Predisposition Interview (Singer, 1973) and consists of 7 items such as:

Did your parents read to you, or tell you stories? (Scored positively if 3 or more times per week.)

Did you ever see pictures or make believe things in your head? (Scored positively if the child reported any type of visual imagery.)

The normative data for the questionnaire is limited to correlations with hypnotizability (.36 to .42) (LeBaron et al, 1988). The Fantasy Questionnaire was translated into Spanish by the experimenter and was given to a Spanish-speaking psychologist for verification and further correction.

The Child Dissociative Checklist

This is a twenty-item checklist developed by Putman, Helmers, & Trickett (1993) consisting of a parent report inventory assessing several domains of dissociative behavior in children. These include amnesia, rapid shifts in demeanor, spontaneous trance states, and hallucinations (Putnam et al, 1993). The instructions ask the adult completing the scale to circle the response on a 3-point scale (2 = very true, 1 = somewhat or sometimes

true, and 0 = not true) that best describes the child's behavior on a given item over the past 12 months. The sum of the item scores gives a total score. For example:

0 1 2 Child does not remember or denies traumatic or painful experiences that are known to have occurred.

0 1 2 Child goes into a daze or trance-like state at times or often appears "spaced-out." Teachers may report that he or she "daydreams" frequently in school.

The CDC is the most extensively validated and most widely used research measure to assess dissociative processes in children (Putnam & Hornstein, 1992; Putnam, Helmers, & Trickett, 1993; Putnam, 1996). Putnam et al (1993) reported measures of construct (.73) validity while also reporting strong internal consistency for the scale. Also a 1-year test-retest reliability coefficient of .69 has been established. The CDC was translated into Spanish by the experimenter and then given to a Spanish-speaking psychologist for verification and additional correction.

Children's Fantasy Inventory: Absorption & Vividness.

The Absorption and Vividness scale from the Children's Fantasy Inventory (CFI) (Rosenfeld et al, 1982) was another dependent variable in the study. These scales consist of 12 questions to which responses can be scored "a lot" = 2, "a little" = 1, and "no" = 0.

When you are by yourself, do you like to sit and just be very quiet?

Do you keep right on playing or reading, even when it's noisy in the room? (Rosenfeld et al, 1982, p. 352).

The CFI is derived from Singer's (1970) Imaginal Process Inventory and describes a variety of fantasy and imaginative behaviors in the child. The test-retest reliability of the scale fluctuates between .39 and .59 after one year, with good internal consistency, as measured by coefficient alpha (.41 to .66). The absorption and vividness scales were translated into Spanish by the experimenter. For correction purposes, it was given to a Spanish-speaking psychologist who is identified as a research expert in the field of hypnosis.

Response Expectancy Measures

The response expectancy of the parents was assessed by providing the parents with a written description of each suggestion and asking them to rate, using a 5-point Likert scale, the degree to which they expect their children to respond behaviorally and experientially (subjectively) to each suggestion. For the hand-lowering suggestion, for example, they will be asked to predict how low their child's hand will descend (1 = not at all, 5 = very high) and how heavy their hands will feel (1 = not light at all, 5 = very light).

Hypnotic response expectancy was calculated as the sum of these ratings. This was a similar procedure conducted in a study by Braffman and Kirsch (1999) but only with adult subjects. The authors found internal consistency coefficients for non-hypnotic and hypnotic expectancies of .93 and .91, respectively, indicating high reliability. The Likert scales were presented in Spanish.

## Pilot Study

A small pilot study was conducted with 5 subjects before carrying out the main experiment. This was made to determine the relevance and usefulness of the various instruments and the adequacy of the translations into Spanish. It was important to assess the response of parents and children with respect to the wording of the instruments.

This process also helped develop a standardized procedure for giving instructions to the subjects and to ensure reliability in scoring from both researchers. Ensuring consistency in standardizing the procedure was of extreme importance for administering the instruments, since the experiment took place in the living room of the subject's home, were more context variability could influence the process.

## Procedure

The word hypnosis still has a negative stigma among the general public. Therefore it was difficult to obtain institutional permission from schools to do research in this area. For that reason, contact was made with superintendents and principals of private schools, the leaders of Girl Scout and Boy Scout troops, the pastors of various churches, and a number of physicians in the metropolitan area of San Juan, Puerto Rico, as well as in the central, east, south, and south west parts of the island. This procedure was similar to the one used by Cooper (1976), in his study of hypnotic susceptibility of children from non-clinical populations.

The nature of the study was explained to them, and their cooperation was requested in suggesting the names of families with children within the age range of the

study who might be interested in participating. A form letter was sent to parents, briefly explaining the study as one involving measures of imagination and suggestion in children. It was requested that at least one of the parents participate in the study, and that they not share this information with their children prior to the study. When parents were contacted, they were provided a consent letter, explaining the nature of the study (see Appendix A). Then time was allowed for them to think about the possibility of participating.

When parents agreed to participate, a home visit was arranged for a specific date and time for the procedure. The study was conducted in the children's homes, in a private room or area. The children and their parents did not receive payment for their participation; however, children were given a gift certificate for a complimentary meal from a fast-food restaurant as a gesture of appreciation. The gift certificates were donated to the researcher for the purposes of the study.

The data collection process was originally intended to include only the San Juan metropolitan area, but due to the difficulty of recruitment, it was expanded to several geographic areas around the island, where potential subjects were identified and agreed to participate. It took 10 weeks to collect the data, from June to August 2002.

A third-year doctoral student in psychology was recruited as a research assistant to collect the data in the south and southwest region of Puerto Rico. The student already had graduate-level training in clinical hypnosis from local as well as nationally accredited clinical hypnosis institutions and organizations in the United States. The student was properly trained in administering the SHCS-C, as well as the other measurement scales

utilized in the study.

Once the procedure was finished, parents were invited to participate in a 3-hour experiential workshop on stress management techniques, in appreciation of their participation in the study. The workshop was offered on a Saturday morning, 3 weeks after all the data was collected. It was held at the Continuing Education Program of the School for Public Health, at the Medical School of the University of Puerto Rico. Families were also told how they could obtain the results of the study, once finished.

Approval for the use of human subjects was obtained through the Human Subjects Approval Committee of the School of Education at the University of Massachusetts. The informed consent letter used conformed to criteria required by that committee.

Step 1: Home Visit and Obtaining Parental Consent

Parents of children without a clinical diagnosis and who were not receiving psychiatric or psychological treatment were visited at their homes, once a date and time was set by telephone. In a private room or area at the family's home, the parents or guardians were presented with the Consent for Participation letter (Appendix A) before the study was carried out. The letter provided some basic information about the study, in an effort to dispel misinformation concerning hypnosis. Information regarding the procedures and potential risks of the study were also provided in the letter, so that the adult could make an informed choice about participation. It was emphasized that hypnosis is generally considered a safe process. Parents were asked not to share information about the study with their children prior to the procedure.

In the presence of his/her parent or guardian, each child was asked to sign the Assent for Participation letter (Appendix B). After this form was completed, the following explanation was given to the child, with the parent present:

> "I am doing a research study to learn more about how the imagination works in children. While your father/mother sits here with us, I will be asking you to do some imagination exercises that most children enjoy. I will also be asking you questions regarding how you use your imagination. You don't have to participate, but most kids enjoy it. Before that, I will ask your dad/mom to answer a questionnaire concerning what they think about the questionnaire that I will give you. This process will take us about 45 minutes to an hour."

Step 2: Administering the Response Expectancy Scale

In the presence of their child, parents were given the following explanation to answer the Response Expectancy Scale (Appendix C) before administering the SHCS-C.

> "Here is a written description of the exercises on the imagination that I will be presenting to your child. I want you to read it carefully and then rate to what degree you expect your child to respond to the exercises that I will asked him/her. Read the instructions and the questions carefully, and rate your expectation of his/her performance before I start with him/her."

The same procedure was repeated with the parent prior to the second administration of the SHCS-C, within the hypnotic context. The following instructions were given to the parent for this occasion.

> "Now I am going to introduce your child to a brief experience of hypnosis and then I will ask him/her the same exercises on the imagination as before. Again, I want you to rate your expectation of how you think he/she will perform on the exercises, but this time, keep in mind that I will be inducing a brief experience of hypnosis on him/her."

After the parent had completed the Response Expectancy Scale, the researcher administered the SHCS-C for the second time.

Step 3: Administering the SHCS-C

After the parent/guardian had completed the expectancy scale, the SHCS-C was administered to the child, first without the induction procedure. The following instructions were given:

> "I'm going to help you learn some interesting things about the imagination today. I will ask you to think of some different things, and we will see how your imagination works. Some people find it easier to imagine some things than others. I want to find out what is most interesting to you. It works best if you close your eyes…" Adapted from Morgan and Hilgard, 1979).

Once the child had completed the SHCS-C, the parent/guardian was given the expectancy scale for the second test, then the SHCS-C was re-administered with complete induction, as outlined by Morgan and Hilgard (1979).

In this induction, the child was invited to experience relaxing visual imagery (i.e. floating on a cloud) and then to focus on his/her thumbnail (for younger children, a small face is drawn with a pen). While the child is focusing, suggestions of relaxation are interspersed with suggestions of continued focusing, and gradually with suggestions that he/she close his/her eyes. After the induction was complete, the seven tasks of the scale were re-administered. At the end of the procedure, subjects were invited to talk about their experience.

Step 4: Administering the Questionnaires and the Child Dissociative Checklist

After the SHCS-C was given, the Children's Fantasy Inventory and Fantasy Questionnaire were administered in interview format. At the same time, the parents were given the Child Dissociative Checklist to be completed in the presence of their children.

Step 5: Debriefing

After all the procedures were completed, the children and parents/guardians were invited to talk about what they had experienced or to ask questions. Parents, as well as older children, were invited to an experiential workshop for stress management techniques that took place at the end of August.

## Data Analysis

The use of change scores in suggestibility scales as a measure of hypnotizability has been the typical approach by past researchers using the Stanford scales. The first to criticize this approach was Weitzenhoffer (1980). He argued that hypnotic responsiveness should be re-conceptualized as the change in suggestibility that is produced by hypnotic induction. However, E.R. Hilgard, (1981) criticized the use of change scores as a measure of hypnotizability, arguing potential statistical problems. Specifically, correlations between change scores and non-hypnotic suggestibility were likely to be falsely small, over-inflating the associations between change scores on hypnotic suggestibility. In a more recent study, Kirsch (1997) suggested that the statistical problems posed by change scores could be minimized through the use of regression analysis and residual change scores.

For the data analysis of this study, standard regression was used to bypass past methodological problems with change scores. This statistical approach was modeled after the approach taken by Braffman and Kirsch (1999) in a similar study, using adult subjects, and later replicated by Poulsen (2000) in the study using this approach, with child subjects.

In these studies, non-hypnotic suggestibility scores were used in regression equations (along with other predictor variables) with hypnotic suggestibility as the dependent variable. As Braffman and Kirsch (1999) and Poulsen (2000) argue, in this way, non-hypnotic suggestibility could be controlled statistically, yielding beta weights indicating the degree to which the predictor variables were related to hypnotizability.

# CHAPTER III

# RESULTS

## Descriptive Statistics

A total of 51 children (29 females and 22 males) between the ages of 8 and 15 (M = 11.27; SD = 2.58) were included in the final data analysis. All children were Spanish- speaking Puerto Ricans. The children came from low to middle SES families. Birth order among the subjects ranged from 1 to 3 with a mean rank of 1.78 (SD = .70). A total of 51 parents/guardians (39 females and 12 males) between the ages of 28 and 60 (M = 39.52; SD = 6.75) participated in the study. The range of education (in years) for the parents was from 7 to 22 with a mean of 15.83 (SD = 2.45). Thirty-four parents were married (66.7%), 10 (19.7%) were divorced or separated, 6 (11.8%) were single, and 1 (2.0%) was a widow.

The mean score for non-hypnotic suggestibility was 4.63 (SD = 1.43) while the mean score for hypnotic suggestibility was 5.12 (SD = 1.48). The mean increase of .49 suggestions was significant, $t(50) = 2.48$, $p < .05$. Scores from the two conditions were highly correlated ($r = .53$, $p < .01$). This correlation is smaller than that obtained with the SHCS-S means of between 4 and 6 (depending on age) reported by Morgan and Hilgard (1979) and by Poulsen (2000). Table 2 describes the frequency distributions of responses on the SHCS-C, both with and without and induction, respectively. Figure 1 and 2 portray these distributions graphically.

Table 2.

Frequency distributions of Responses on the SHCS-C

| SHCS-C Score | Frequency H | Percent H | Frequency NH | Percent NH |
|---|---|---|---|---|
| 1 | 2 | 3.9 | 1 | 2.0 |
| 2 | 8 | 15.7 | 2 | 3.9 |
| 3 | 5 | 9.8 | 9 | 17.6 |
| 4 | 13 | 25.5 | 10 | 19.6 |
| 5 | 1 | 2.0 | 15 | 29.4 |
| 6 | 11 | 21.6 | 9 | 17.6 |
| 7 | 11 | 21.6 | 5 | 9.8 |

Note: H = Hypnotic Suggestibility, NH = Non-hypnotic Suggestibility

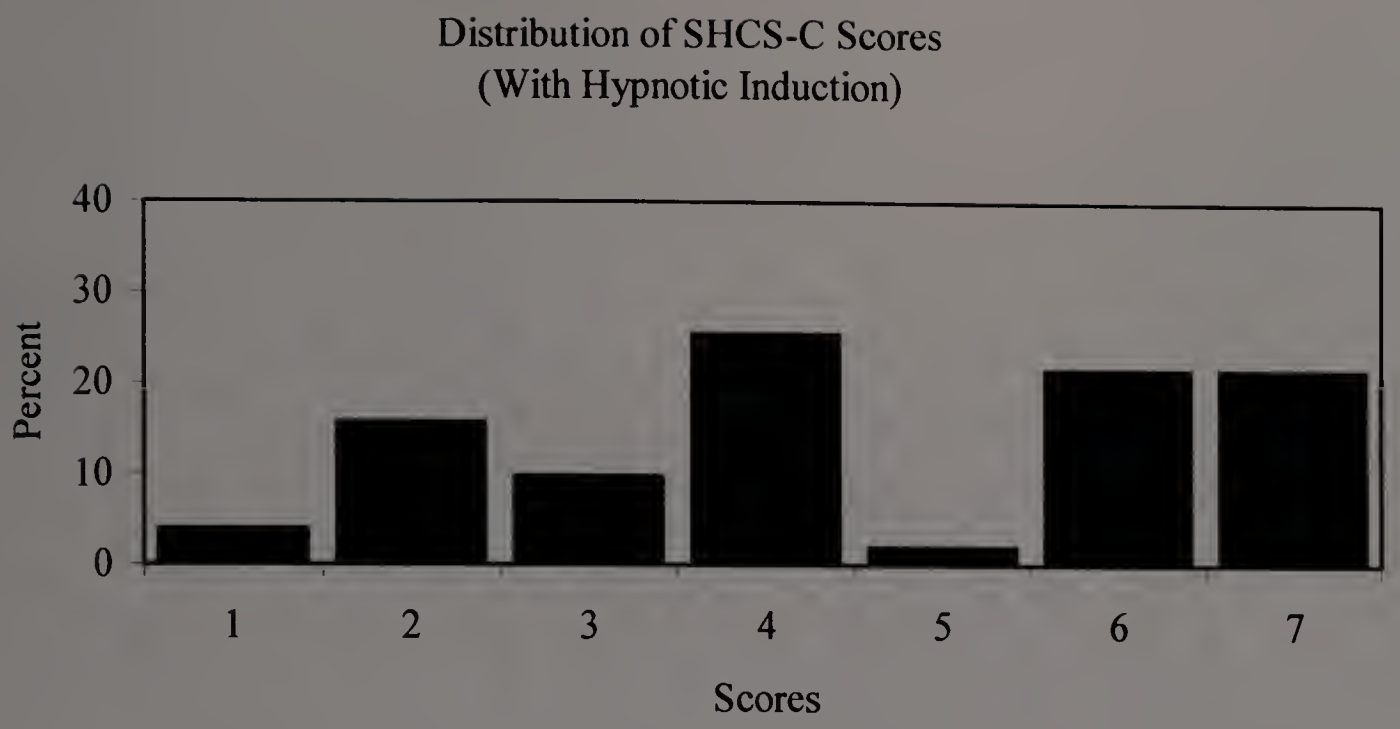


Figure 1. Distribution of SHCS-C Scores With Hypnotic Induction

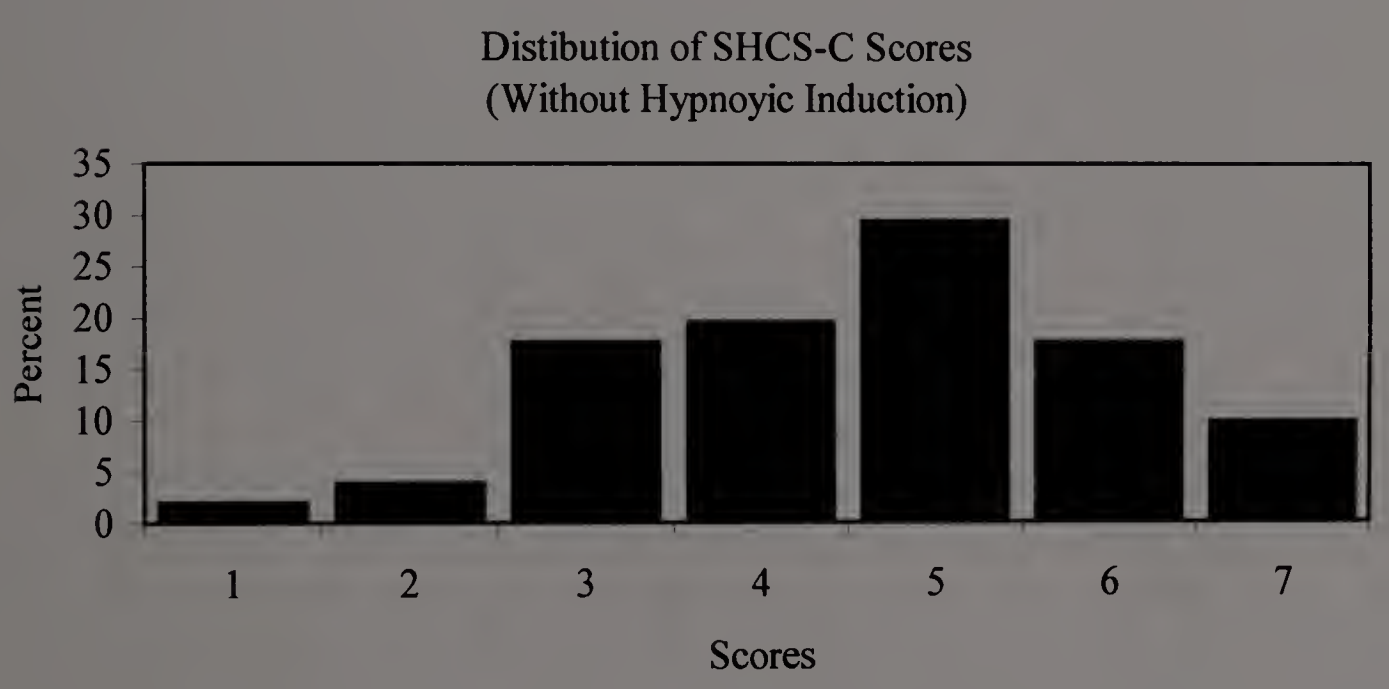


Figure 2. Distribution of SHCS-C Scores Withouth Hypnotic Induction

Although there was an increase in suggestibility following the induction of hypnosis, it was not produced in all subjects. Of the participants, 19.6% passed fewer

suggestions following the induction; 29.4% showed no change at all; and 51% exhibited greater suggestibility after the induction. These results were contrary to those found in the Poulsen (2000) study, where none of the participating children scored lower in suggestibility after the induction procedure. However, the results were similar to those obtained by Braffman and Kirsch (1999), where some subjects (college students) in their study decreased their suggestibility scores after the induction procedure.

The distribution of scores on the SHCS-C, with induction, was found to be higher at the middle of the scale, and showed a skewed tendency towards the high end of the scale. This is somewhat different from what previous researchers have found (Poulsen, 2000; Plotnick et al, 1991; LeBaron et al, 1988), where they reported a clear tendency for distributions of scores to be slightly skewed towards the high end of the scale in a consistent way. Figure 3 portrays a joint distribution of induction and no-induction SHCS-C scores. Scores for subjects who achieved the same score under both conditions were plotted on the diagonal. Scores for those subjects who where less suggestible with hypnosis were plotted below the diagonal. Scores for those subjects who were more suggestible with hypnosis were plotted above the diagonal.

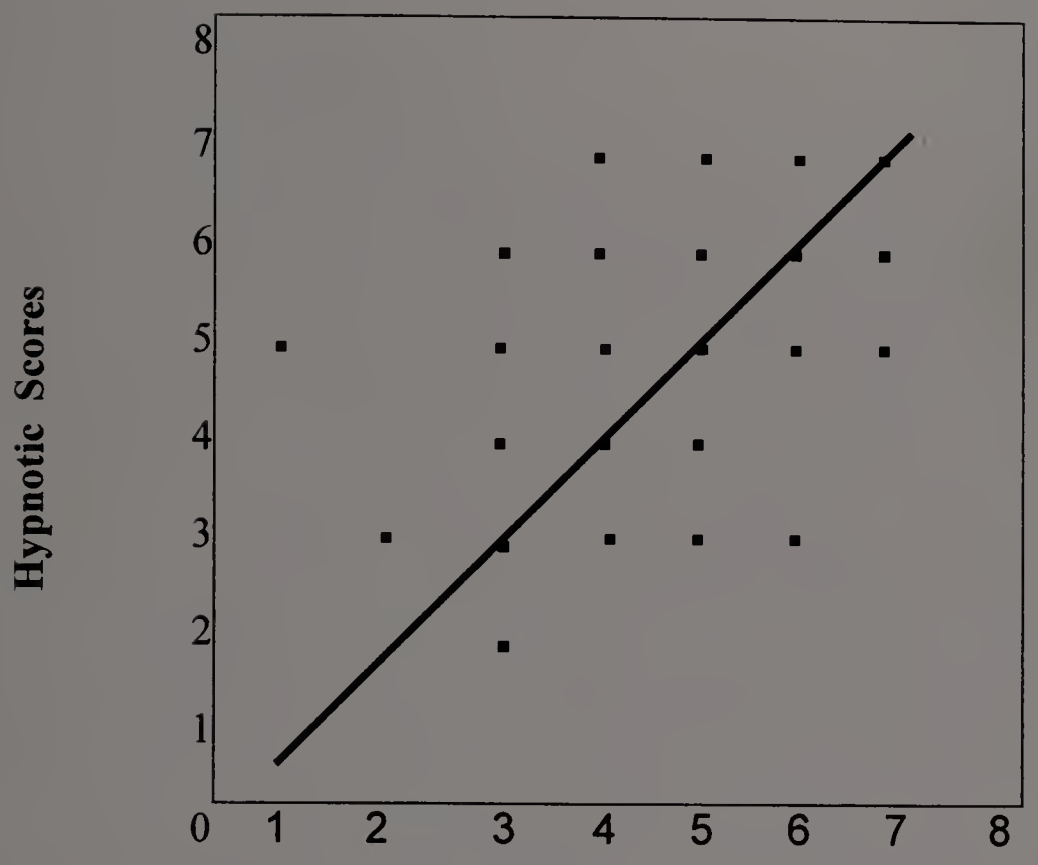


Figure 3. Joint Distribution of Hypnotic and Nonhypnotic Scores

The mean score for non-hypnotic response expectancy for parents was 50.01 (SD = 9.91), while the mean score for hypnotic response expectancy was 54.16 (SD = 11.27). There was a mean increase in parental expectancy regarding their children's suggestibility of 4.15 on the scale. The mean increase for parental expectancy was significant, $t(48) = 4.03$, $p < .001$. The two scores were highly correlated ($r = .79$, $p < .01$).

Means and standard deviations for the additional variables under consideration are summarized in Table 3. The mean score on the Fantasy Questionnaire was 2.69 (SD = 1.22), which is consistent with its original normative group (LeBaron et al, 1988). The mean score on the Absorption Scale of the CFI was 6.14 (SD = 2.14) and the mean score on the CFI Vividness Scales was 6.23 (SD = 2.40). Finally, a mean of 4.80 (SD = 5.05) was obtained on the Child Dissociative Checklist. A score of 12 or above on the CDC is considered evidence of significantly elevated dissociation (Putnam, 1994). As noted previously, children with a diagnosis of Dissociative Disorder NOS averaged 16.8 +/- 4.8, while those with Multiple Personality Disorder (or Dissociative Identity Disorder) averaged 35.16 +/- 4.3 (Hornstein & Putnam, 1992).

Table 3.

Descriptive Data for Predictor Variables

| Variable | M | SD | Minimum | Maximum | N |
|---|---|---|---|---|---|
| Fantasy (FQ) | 3.66 | 1.36 | 1 | 7 | 51 |
| Vividness (CFI:V) | 6.23 | 2.40 | 1 | 12 | 51 |
| Absorption (CFI:A) | 6.14 | 2.14 | 2 | 11 | 51 |
| Absorption + Vividness (CFI: A+V) | 12.37 | 3.70 | 6 | 21 | 51 |
| Dissociation (CDC) | 4.80 | 5.05 | 0 | 29 | 51 |
| NH-Response Expectancy (RES) | 50.0 | 9.91 | 19 | 68 | 51 |
| H-Response Expectancy (RES) | 54.16 | 11.27 | 18 | 70 | 51 |

## Associations Between Parental Response Expectancy, Suggestibility and Imaginative Involvement

A standard multiple regression procedure was employed to predict hypnotizability (defined as hypnotic suggestibility with non-hypnotic suggestibility controlled) as well as non-hypnotic suggestibility on the basis of the hypothesized predictor variables. Analysis was performed using SPSS REGRESSION and FREQUENCIES for evaluation of assumptions. This procedure was the one used by Poulsen (2000) in previous research with a clinical sample of children within the same age range.

Assumptions for regression were evaluated according to the criteria outlined by Tabachnick and Fidell (1996). Two cases of outliers were eliminated from the final analysis. This procedure improved the normality of the variables, while reducing the skewedness of the distributions. These two cases were not representative of the sample. In addition, residual scatter plots were examined to assess normality, linearity, and homoscedasticity between obtained and predicted values graphically. To fulfill assumptions for multicolinearity and singularity, Pearson correlation coefficients were calculated for the predictor variables. In this way, it was possible to exclude or combine highly intercorrelated predictors from the regression equations. Table 4 presents the correlation coefficients between these variables. Results indicate that the only variables related to imaginative involvement and associated with each other were Absorption and Vividness ($p < .05$). These results are different than those found by Poulsen (2000) in his study with children and adolescents, where Fantasy, Vividness, and Absorption were all significantly associated with each other.

Non-hypnotic parental response expectancy and Hypnotic parental response expectancy on the children's suggestibility (hypnotic and non-hypnotic) scores did correlate significantly with each other ($r = .79$, $p < .01$). There was a significant difference in parental response expectancies between the hypnotic and the non-hypnotic condition, $t(48) = 4.03$, $p < .001$. Contrary to what was predicted, non-hypnotic and hypnotic parental expectancy of the children's performance in the SHSS-C did not show a significant association with their children's non-hypnotic and hypnotic suggestibility. Neither of the two measures of expectancy was associated with the variables related to imaginative involvement. When non-hypnotic suggestibility was controlled through regression, parental response expectancies (hypnotic and non-hypnotic) did not significantly predict additional variance in hypnotizability.

Hypnotic and non-hypnotic parental response expectancy and dissociation were not correlated with each other. Similar to one previous study (Poulsen, 2000), dissociation did not correlate with any of the imaginative involvement variables.

Table 4.

Correlations between Predictor Variables

| | **Dissociation** | **Fantasy** | **Vividness** | **NH-RE** | **H-RE** |
|---|---|---|---|---|---|
| Absorption | .163 | -.20 | .33* | .17 | .20 |
| Vividness | .13 | -.17 | | -.13 | -.11 |
| Fantasy | .26 | | .04 | .21 | .19 |
| Dissociation | | .18 | .12 | -.06 | -.18 |

Note: NHRE = nonhypnotic response expectancy; HRE = hypnotic response expectancy
*p = < .05 ; ** = p < .01

Table 5.

Correlations Between Predictor variables for the Pulsen (2000) study and the present study

| | **Poulsen study (2000)** | | | **Present study** | | |
|---|---|---|---|---|---|---|
| | Vividness | Fantasy | Dissociation | Vividness | Fantasy | Dissociation |
| Absorption | .64*** | .58*** | .16 | .33* | -.20 | .16 |
| Vividness | | .48*** | .05 | | -.17 | .13 |
| Fantasy | | | .21 | .04 | | .26 |
| Dissociation | | | | .12 | .18 | |

Note: *p= <.05 ; ***p= <.001

Associations between parental response expectancies and imaginative variables with non-hypnotic and hypnotic suggestibility are presented in table 6. Vividness was

significantly correlated with hypnotic and non-hypnotic suggestibility ($p < .01$), while Absorption was significantly correlated with hypnotic ($p <. 05$), but not with non-hypnotic suggestibility. Both Absorption and Vividness combined were significantly correlated with hypnotic and non-hypnotic suggestibility ($p <.01$). No significant correlations were found between Fantasy, Dissociation , Parental Non-hypnotic and Hypnotic Response Expectancy with hypnotic and non-hypnotic suggestibility.

Table 6.

Correlations Between Suggestibility and Predictor Variables

| | **Correlation** | | **Beta** |
|---|---|---|---|
| | **Non-hypnotic Suggestibility** | **Hypnotic Suggestibility** | **Hypnotizability** |
| Absorption | .22 | .32* | .16 |
| Vividness | .52* | .37** | .19 |
| Fantasy | .07 | .03 | .04 |
| Absorption + Vividnes | .46** | .38** | .20 |
| Dissociation | .06 | .06 | .10 |
| Non-hynotic Response-Expectancy (parent) | -.05 | .21 | .24 |
| Hypnotic Response-Expectancy (parent) | .15 | .25 | .18 |

Note: * = $p <. 05$; **= $p <. 01$

To calculate hypnotizability, also displayed in Table 6, seven regressions were performed using a two-variable simultaneous model. Each time, hypnotic suggestibility was regressed on non-hypnotic suggestibility and one of the imaginative involvement

variables. Parental expectancy, for both conditions, was also included in the regressions performed. With this statistical procedure, non-hypnotic suggestibility was controlled, yielding the degree to which the other variable predicted hypnotizability. Table 7 display the sequence of all seven multiple regression and how the predictor variables were blocked for each gression analysis.

Table 7

Sequence For All Multiple Regressions

| **Equation** | **Variables Entered** | **Variables Not Entered** |
|---|---|---|
| Equation 1 | Absorption + Equation Nonhypnotic Suggestibility | Vividness, Fantasy, Absorption + Vividness, Dissociation, NHRE, HRE |
| Equation 2 | Vividness + Nonhypnotic Suggestibility | Absorption, Fantasy, Absorption + Viviness, Dissociation, NHRE, HRE |
| Equation 3 | Fantasy + Nonhypnotic Suggestibility | Absorption, Vividness, Absorption + Vividness, Dissociation, NHRE, HRE |
| Equation 4 | Absorption + Vividness, Nonhypnotic Suggestibility | Absorption, Vividness, Dissociation, Fantasy, NHRE, HRE |
| Equation 5 | Dissociation + Nonhypnotic Suggestibility | Absorption, Vividness, Absorption + Vividness, Fantasy, NHRE, HRE |
| Equation 6 | NHRE + Nonhypnotic Suggestibility | Absorption, Vividness, Absorption + Vividness, Fantasy, Dissociation, HRE |
| Equation 7 | HRE + Nonhypnotic Suggestibility | Absorption, Vividness, Absorption + Vividness, Fantasy, Dissociation, NHRE |

Note: NHRE = Nonhypnotic Response Expectancy; HRE = Hypnotic Response Expectancy

None of the predictor variables were found to be significantly associated with hypnotizability. This was in marked contrast to the results obtained by Poulsen (2000), where both Vividness and Absorption were found to be significantly associated with hypnotizability in a clinical sample of children in the same age range. Table 8 presents the summary of the standard multiple regression for the all the variables used in the study.

Table 8.

Standard Multiple Regression of Hypnotic Suggestibility and Predictor Variables

| Variables | R | R Square | Adjusted R Square | Partial Correlations | Semi-Partial Correlations | B |
|---|---|---|---|---|---|---|
| Absorption | .52 | .27 | .24 | .18 | .16 | .16 |
| Vividness | .50 | .26 | .23 | .14 | .12 | .14 |
| Fantasy | .50 | .25 | .21 | .06 | .05 | .05 |
| Dissociation | 50 | .25 | .22 | .11 | .10 | .10 |
| Absorption + Vividness | .52 | .27 | .24 | .20 | .17 | .19 |
| Non-HRE | .55 | .30 | .27 | .27 | .24 | .24 |
| HRE | 53 | .28 | .25 | .21 | .18 | .18 |

Note. HRE = Hypnotic Resonse Expectancy

Regression was also used to build a model predicting non-hypnotic suggestibility from Absorption, Vividness, and Fantasy. A combined variable of Absorption and Vividness (since they come from the same scale, and are intercorrelated) was used for the regression.

Results did not show any of the variables as unique predictors of imaginative suggestibility. A priori power of the study ranged from .16 to .97 for the predictor variables and observed power ranged from .17 to .90 for the predictor variables including hypnotic and nonhypnotic response expectancy. Table 9 presents both apriori and observed power for all the predictor variables.

Table 9

Apriori and Observed Power for Predictor Variables.

| | **Apriori** | | **Observed** | |
|---|---|---|---|---|
| | NHS | HS | NHS | HS |
| Absorption | .64 | .97 | .41 | .69 |
| Vividness | .84 | .97 | .98 | .90 |
| Fantasy | .97 | .97 | .17 | .17 |
| Dissociation | .37 | .64 | .17 | .17 |
| Nonhypnotic RE | | | .17 | .41 |
| Hypnotic RE | | | .41 | .69 |

Note: NHS = Nonhypnotic Suggestibility; HS = Hypnotic Suggestibility;
RE = Response Expectancy

Finally, hypnotic suggestibility was regressed on non-hypnotic suggestibility and Absorption + Vividness to build a model predicting hypnotizability. Again, Absorption and Vividness were included as one aggregate variable. Predictably, non-hypnotic suggestibility accounted for most of the variance (Beta = .40; $p < .05$) in hypnotizability. Absorption + Vividness did not emerge as a unique predictor of hypnotizability. This model obtained statistical significance in accounting for 27% (24% adjusted) of the variance in hypnotizability: $F(46, 2) = 8.7$, $p < .001$.

# CHAPTER IV

# DISCUSSION

## The Stanford Hypnotic Clinical Scale for Children in a Cross-Cultural Context

The findings in the present study corroborate those of previous one (Braffman & Kirsch, 1999; Poulsen, 2000) in relation to the high correlation between non-hypnotic and hypnotic suggestibility ($r = .53$; $p < .001$). This correlation is similar to the Braffman and Kirsch (1999) study, where they found a .67 ($p < .001$) correlation between non-hypnotic and hypnotic suggestibility for observed behavior in their sample of university students, and the correlation found by Weitzenhoffer and Sjoberg (1961) of .63 ($p < .01$) in the original results of their study. The correlation found in this research is similar, though smaller than that obtained by Poulsen (2000), .83 ($p < .001$) in a clinical sample of children.

As in the studies by Poulsen (2000), Braffman and Kirsch (1999), Weitzenhoffer and Sjoberg (1961), in this study, the effect of inducing hypnosis was to produce a modest increase in response to suggestibility scores. Hypnosis did increase suggestibility for 51% of the sample. For 29.4% of the sample, it did not increase suggestibility, while in fact, it appeared to have a negative effect on 19.6% of the subjects. This data is very similar to the results obtained by Braffman and Kirsch (1999) with a sample of university students. The authors found that 54% of their subjects did not increase suggestibility with hypnosis, and 25% scored lower on suggestibility after the hypnosis procedure. On the other hand, the results of this study contrast with those reported by Poulsen (2000)

regarding the impact of the hypnosis procedure on suggestibility. In that study, no subjects showed a decrease in suggestibility when an induction was administered.

In the present study, non-hypnotic suggestibility was the only predictor that accounted for the variance in hypnotizability. These results were similar than those obtained by Poulsen (2000) in his study with children from an inpatient psychiatric unit. Although the present study found less predictability of variance in hypnotizability than did the Poulsen (2000) study, the results could be taken to suggest that the SHSS-C is a more valid measure of imaginative suggestibility than of hypnotizability.

The difference in degree of the correlations between non-hypnotic and hypnotic suggestibility, as well as the difference in predictability of the variance in hypnotizability by imaginative (non-hypnotic) suggestibility, could be related to differences in the sample of both studies. In contrast to the Poulsen (2000) study, the present study used a non-clinical sample of children who were primary Spanish-speaking, in a less structured context -- their living room in their homes. In addition, the children in this study answered the scales on both conditions in the presence of one of their parents. Contextual as well as interpersonal variables that were not measured in the study could have influenced the performance of the children in the measuring instruments used for the study.

The current findings also highlight another problem that was addressed by Poulsen (2000) and other researchers concerning the small number of items – seven – making up the SHSS-C scale, and its tendency to yield distributions skewed towards the high end of the scale (Poulsen, 2000; Plotnick, Payne, & O'Grady, 1991; LeBaron and

Zeltzer, & Fanurik, 1988; Zeltzer & LeBaron, 1984). The present study was not an exception, and the results revealed a similar tendency (see Figures 1 and 2). As pointed out by the previous researchers, this problem indicates the relatively low power of the SHSS-C to discriminate between moderate and high responders to imaginative suggestions.

Poulsen (2000) suggested that a more difficult version of the SHCS-C, with more items, would yield greater change scores. A revision of the SHSS-C with an additional item for post-hypnotic amnesia and another for negative visual hallucination (9 in all), conducted by Zeltzer and LeBaron (1984), found empirical support only for the additional posthypnotic amnesia item when later revised by Plotnick, Payne, and O'Grady (1991). In addition to this important issue, the present study adds another important area related to the usefulness of the SHSS-C. Being the first time that the SHSS-C has been used in Spanish for Puerto Rican children, other studies would have to follow to establish local norms if the scale is going to be used with primarily Spanish-speaking children in future hypnosis research.

The work of Lamas, Valle-Inclan, and Albo (1996) is particularly important as a starting point in this regard. He and his colleagues studied the norms for the 12-item Spanish version of the Stanford Hypnotic Susceptibility Scale, Form C, for 115 normal male and female Spanish adults (undergraduate students). Lamas et al (1996) found results, with the Spanish sample, similar to the original normative studies with adults in the United States.

The Stanford Hypnotic Susceptibility Scale has been established unquestionably as a useful, valid, and stable measure of imaginative suggestibility for English-speaking children the United States (Poulsen, 2002; Braffman & Kirsch, 1999; Kirsch, 1997). However, future research in Spanish-speaking populations of children and adults is needed to establish the SHSS-C as a valid cross-cultural instrument of imaginative suggestibility. The present study is a starting point in that direction.

## Imaginative Suggestibility and Hypnotizability in a Clinical Context

Central to the role of the hypnotizability scales is the prediction and understanding of imaginative suggestibility of children who might benefit from hypnosis in a clinical context. The present study was designed to replicate that of Poulsen (2000), but with a sample of normal, Spanish-speaking children and adolescents in Puerto Rico.

The present research used predictor variables that are similar to those found in previous studies (LeBaron & Zeltzer, 1988; Plotnick, Payne, & O'Grady, 1991; Poulsen, 2000) to be associated with child hypnotic suggestibility, such as fantasy proneness, absorption, and vividness of imagery. Dissociative behavior in children, as measured by the Child Dissociative Checklist (Putman, Helrmers & Trickett, 1993), was also included as a predictor variable.

In addition to the above-mentioned imaginative variables, the study explored the relationship between parental expectancies of their children's responses to hypnotic and non-hypnotic suggestibility and the responses of the children themselves. Although this relationship has not been previously investigated with a population of children, studies in

adults (Stam & Spanos, 1980; Council, Kirsch & Hafner, 1986; Braffman and Kirsch, 1999) have established the importance of expectancy of hypnotic responses in shaping those responses.

Several researchers and clinicians in the area of clinical hypnosis (Call, 1976; Cooper & London, 1976; Lankton, Lankton & Matthews, 1991; Olness & Kohen, 1996) have stressed the importance of integrating parents (whenever appropriate) into the clinical hypnotherapeutic intervention with the child. For instance, the parent of a child with a chronic medical condition can become a collaborator in the use of hypnosis to help the child cope with or alleviate that condition.

Hypnosis has been defined as a procedure in which a person designated as the hypnotist suggests changes in sensations, perceptions, feelings, thoughts, or actions to a person designated as the subject (Kirsch & Irving, 1998). The procedure is part of a context in which situation as well as personality correlate and interact at the same time (Kirsch & Council, 1992). Therefore, it is necessary to start including the attitudes of parents and children, as well as other situational variables that may increase the potential of some children for imaginative involvement, which seems to predict increases in responsiveness (Poulsen, 2000).

The present study did not find any of the used correlates of imaginative suggestibility as unique predictors of hypnotizability. These results were different than those of Poulsen (2000) in his study with children were he found absorption and vividness to be significantly correlated with hypnotizability. However, the results of this study were more consistent with those of Lacquith, Rhue, Lynn, and Seevaratnam (1996)

in their research concerning the cross-cultural aspects of hypnotizability and imagination.

The authors found correlations between hypnotizability and absorption in a sample of English-speaking Malaysian students living in the United States, but not in a sample of English-speaking Malaysian students living in Malaysia. They concluded that culturally based expectancies played an important role in the subjects (living in Malaysia) in mediating the relationship between hypnotizability and measures associated with hypnotizability in Western cultures. In a similar way, culturally based expectancies, subtle translation differences of the scales, as well as contextual variables that were not controlled, could have explain the difference of results between the Poulsen (2000) study and the present one. The impact of context effects in hypnotizability is becoming an important focus of recent research (Jacquith et al, 1996; Page, 1998; Barnier & McConkey, 1999). Certainly, administrating the various measurement scales in the subject's living room is very different than the controlled atmosphere of an office in a clinical setting.

The importance of the context effect in the assessment of hynotizability and the use of hypnotic techniques in clinical interventions can not be overstated. If predicting who might benefit from an intervention with hypnosis is important, it is so in what specific context could be most helpful.

The landscape for clinical intervention with children and adolescents is changing drastically. The pioneering work in the area of family therapy with adolescents from the University of Miami is a good analogy of special importance. The work of Liddle, Dakof, and Diamond (1991), and Liddle, Rowe, Dakof and Lyke, (1998) applying

home-based Multidimensional Family Therapy with adolescents has render promising results in applying clinical interventions in a non-clinical context. These researchers have been applying intensive home-based family therapy with substance abusers adolescents in South Florida. With difficult to accessed families, the authors have developed specific and well-structured therapeutic interventions using the family home as the therapeutic context. If hypnosis is going to be used outside the traditional therapeutic arena (i. e., office, and hospital setting), the effect of specific context variables should be an important area to focus in future research.

## The Role of Parental Expectancy in Suggestibility in Children

The influence of culture through the mass media plays a role in the way the average person perceives hypnosis. For instance, Leah, Rhue, Lynn, and Seevaratnam (1996) argued that the high degree of correspondence in the findings of studies of hypnotic suggestibility across disparate cultures is a function of shared expectancies, attitudes, and interpretations regarding hypnosis and the imagination. In their view, almost everyone in Western culture believes that hypnosis is an altered state of consciousness that can have profound effects on at least some people, and many people in our society associate hypnosis with the imagination and relaxation (Leah et al, 1996).

For persons who have not experienced hypnosis previously, these shared cultural expectations and beliefs may be the main source of information which forms their expectations of what hypnosis is, and how useful (or not) it may be in helping people solve problems. However, most people who held a positive belief about hypnosis think

that it makes an impact when qualified professionals use it. In this regard, parents of children who are hypnotic subjects are not an exception. As mentioned earlier, researchers and clinicians have stressed the importance of parents' beliefs and attitudes toward hypnosis when used with their children in a therapeutic procedure. Nevertheless, no research on this has become part of the scientific literature.

The parents who participated in this study thought that hypnosis would increase their children's responsiveness to suggestions in the SHSS-C when a brief period of hypnosis was induced prior to the administration of the scale. Their expectancy in regard to their children's responses to the scale was higher and significantly different under hypnosis than in the non-hypnotic condition of the scale administration.

A positive attitude toward hypnosis, trust in the researcher, and good rapport may explain their tendency to expect better performance by their children when hypnosis was used. The fact that the researcher was a licensed psychologist, with experience in hypnosis, and the fact that they heard positive things about him, directly and indirectly, may have increased their positive expectancy regarding the hypnotic procedure.

Contrary to what was predicted parental expectancy of responses did not predict their children's responses on the SHSS-C in hypnotic and non-hypnotic conditions. There were no significant correlations between the parents' expectancies about their children's performance, and the children's scores on the suggestibility scale. Parental expectancy responses in regard to the two conditions -- hypnotic and non-hypnotic contexts -- did not correlate with hypnotizability of their children. The fact that parental expectancy responses regarding their children's performance were measured immediately before the

administration of the scales could have prevented those expectancies from affecting their children. It may be that with more time between the expectancy assessment and the administration of the instrument, those expectancies would have influenced their children's suggestibility. With more time between procedures, the parents' transmission of their beliefs about hypnosis to their children, verbally and nonverbally, might have affected the responses to suggestions from the later. This experimental context would have simulated more closely a clinical intervention using hypnosis with a child and one of his/ her parents. It is not uncommon for therapists who use hypnotic approaches to discuss their application to the therapeutic goal with a client in advance of the clinical intervention. When that is the case, it is possible that the family may discuss their ideas and beliefs about hypnosis prior to its therapeutic application, and even in between sessions, once the intervention has been set in motion.

The results of this study were not consistent with those of Braffman and Kirsch (1999), who found that expectancy and motivation predicted behavioral responses to hypnosis in a sample of undergraduate college students. However, there are important differences between the Braffman and Kirsch (1999) study and the present one. In the present study, expectancy was not measured in the children but only in their parents, just before witnessing the administration of the SHSS-C to their children. Therefore, the children's influence on their own expectancy to their responses to suggestion was not measured. In addition, the experimental contexts for the Braffman and Kirsch (1999) study and for the present one were entirely different: the first was carried out in a psychology laboratory in a university facility, the present one, in the living room of the

subject's home. The high degree of variability in the assessment context of this study could have had an influence on the results, adding situational variables for which there were no controls in this study. As Kirsch and Council (1992) have argued before, situational context variables are an important part of the equation in evaluating hypnotic responsiveness to suggestions.

Vividness

In this study, vividness of mental imagery was found to be positively related to non-hypnotic and hypnotic suggestibility. In this regard, the results of this study were similar to that of Poulsen (2000), in which vividness was positively correlated with non-hypnotic suggestibility ($r = .38$; $p < .05$) and with hypnotic suggestibility ($r = .50$; $p < .001$). Interestingly, the results in this study evidenced a similar, yet inverse correlational pattern when compared to those of the Poulsen (2000) study. The correlation of vividness with non-hypnotic suggestibility was almost identical ($r = .52$; $p < .01$) to that obtained by Poulsen (2000) with hypnotic suggestibility, while the correlation found in this study of this variable with hypnotic suggestibility ($r = .37$; $p <. 01$) matched the non-hypnotic suggestibility obtained in the Poulsen (2000). It is possible that those differences are explicable in terms of random fluctuations of the samples in the two studies. Vividness did not contribute unique variance to hypnotizability when non-hypnotic (baseline) suggestibility was controlled, as it was in the case of the Poulsen (2000) study. At the present time, these are the only two studies of clinical or normal populations with children that explore correlations between this variable and hypnotizability. More studies would be needed to draw specific conclusions.

Many researchers have proposed the idea that hypnosis and vividness of mental imagery seem to be closely related. In fact, most induction procedures emphasize that the subjects experience a number of suggestions in what Rhue and Lynn (1987) have referred to as the "ability to hallucinate as real as real". In other words, during hypnosis, subjects are asked to imagine the suggestions given with the greatest degree of vividness possible. In a similar way, children subjected to the SHCS-C are asked to imagine some suggestions (visual, auditory or physical) as if they were real (Plotnick, et al, 1991).

The instrument used in this study to measure vividness included items to assess the subjective experience of daydreams, pretend games, and listening to stories or reading. It consisted of a six-item scale developed from the Children's Fantasy Inventory by Rosenfeld, Huesmann, Eron, and Torney-Purta (1982) with a sample of 748 children of both sexes.

Absorption

Absorption is the tendency to become involved in everyday imaginative experiences (Kirsch & Braffman, 1999), a readiness for experiences of deep involvement, and a heightened sense of the reality of the attentional object (Tellegen & Atkinson, 1974). In this study, absorption was found to be positively related to hypnotic suggestibility. The results are consistent with the findings of Plotnick, Payne, and O'Grady (1991) in their study of 42 children (ages 7-14). The authors found a significant correlation between hypnotic response (hypnotic suggestibility) and absorption ($r = .44$; $p < .01$).

Results of this experiment were also consistent with the findings of Poulsen (2000) in a study of children from a psychiatric inpatient unit, where he also found a significant correlation between absorption and hypnotic suggestibility ($r = .50$; $p < .001$), but not with non-hypnotic suggestibility. Similarly, in this study, absorption was not correlated with non-hypnotic (baseline) suggestibility.

The results of this experiment are also consistent with the findings of Braffman and Kirsch (1999) in their study of adults, who reported a significant correlation between absorption and hypnotic suggestibility ($r = .21$; $p < .01$) and non-hypnotic suggestibility ($r = .21$; $p < .01$), this last correlation being in contrast with the findings of this study.

Finally, when non-hypnotic suggestibility was controlled, absorption was not found to be a unique predictor of hypnotizability. These findings are consistent with the results obtained by Braffman and Kirsch (1999) in a sample of adult subjects in which absorption was not found to be a correlate of hypnotizability. These results are in contrast with the findings of Poulsen (2000), who reported a significant correlation between absorption and hypnotizability ($r = .28$; $p < .001$) in his research.

Fantasy Proneness

Fantasy proneness is the characteristic of having a rich and intense involvement in fantasy, both in childhood and in adult life (Kirsch & Braffman, 1999). In this research, fantasy proneness was not found to correlate significantly with either non-hypnotic suggestibility or with hypnotic suggestibility.

These findings are inconsistent with other studies from previous research regarding the correlation of fantasy-prone behavior and hypnotic suggestibility (LeBaron

et al, 1988; Plotnick, Payne, & O'Grady, 1991; Poulsen, 2000). LeBaron and colleagues (1988) found significant correlations in two samples of children of .42 ($p < .03$) and .39 ($p < .02$), for study 1 and 2, respectively, of their sample. Plotnick, Payne, & O'Grady (1991) found significant correlations ranging from .42 ($p < .05$) and .53 ($p < .05$) between SHCS-C scores of children (ages 7-14) and fantasy measures (absorption, fantasy play, vividness of imagery). Poulsen (2000) also found significant correlations between fantasy measures and non-hypnotic ($r = .51$; $p < .001$) and hypnotic suggestibility ($r = .52$; $p < .001$).

When non-hypnotic (baseline) suggestibility was controlled through regression, fantasy proneness did not significantly predict additional variance in hypnotizability. These findings are similar to the only two studies that had used fantasy proneness as a predictor of hypnotizability, once imaginative suggestibility is controlled (Braffman & Kirsch, 1999; Poulsen, 2000). In his study with children, Poulsen (2000) also found that, once controlled through regression, fantasy proneness did not significantly predict additional variance in hypnotizability. Similarly, Braffman and Kirsch (1999) found consistent results in a sample of adult subjects. The authors found no significant correlation between fantasy proneness and hypnotizability, therefore not predicting additional variance in hypnotizability.

The Fantasy Questionnaire used in this study was designed to elicit information about a child's fantasy-related experiences during the ages of approximately 4 to 7 years. Subjects had been asked to respond retrospectively to these questions. High-scoring children were those who engaged in frequent pretend play, read often, and listened to

stories told or read by their parents, had an imaginary friend or toy, and/or believed in magic. Contrary to what was predicted in this study, fantasy proneness was not positively related with suggestibility.

Dissociation

Dissociation behavior, as measured by the parent-completed Child Dissociative Checklist, was not found to be significantly related to imaginative suggestibility or hypnotizability. The mean of 4.80 (SD = 5.05) obtained in this sample was far smaller than the one of 11.40 (SD = 6.39) obtained by Poulsen (2000) in his study with a child population of the same age. However, this difference might be explained by the fact the present study used a non-clinical sample of children, as opposed to Poulsen's (2000) sample of psychiatric inpatients. The mean score obtained in this study was far lower than the cutoff score of 12 that is considered to be evidence of clinically-elevated dissociation (Hornstein & Putnam, 1992).

The present study failed to establish a relationship between dissociative behavior and non-hypnotic suggestibility. The results of this study are similar to the only other study that has considered dissociation as a correlate of hypnotic and non-hypnotic suggestibility in children (Poulsen, 2000), regardless of the marked differences in the CDC scores for the two samples.

Despite theoretical assertions explaining hypnosis as a dissociation process (Hilgard, 1973; Bowers, 1992) the results of this study contradict such a view. In fact, Putnam (1996) has eloquently argued about the problem of many mental health professionals that see dissociation as some kind of "self-hypnosis gone awry".

Some professional workshops on dissociative dissorder keep reinforcing this incorrect view of hypnosis and dissociation (Putnam, 1996). The evidence in this study suggested that there is no reason to believe that there is a relation between childhood dissociation and hypnotizability. However, this being the first investigation that has explored childhood dissociation as a correlate of hypnotic response in Puerto Rican children, more research would be needed to corroborate these findings.

## Limitations of the Study

There were several challenges posted by this research, due to its nature and the process itself. First of all, by the very nature of popular notions of hypnosis and the constant misinformation of the general public, obtaining approval at various levels of the study was a difficult task. For instance, it was originally planned to carry out the study with children at different public and private schools, but efforts to contact school administrators, much less get institutional approval, were not productive. Problems in attempting to recruit child subjects for hypnosis research are not new. Researchers like Poulsen (2000) and Plotnick, Payne, and O'Grady (1991) have documented similar challenges. Unfurtunately for a great number of institutions and persons, unwillingness to participate is the norm, due to negative notions about hypnosis that are still prevalent in the general public. This is an important issue that needs to be worked constantly with clear and realistic information about what is what is not hypnosis.

For that reason, it was decided to use a more time-consuming recruitment process, but one that was more personal and direct in its approach: to contact potential community

organizations, as well as physicians, and to employ word-of-mouth communication to secure the largest number of potential candidates possible for the study. This means that subjects were not randomly selected, rending impossible to generalize the results to the population of children of the studied age group.

A second important challenge was the need to secure parental participation with that of the child. This implied scheduling in advance, to coordinate with the parent and adjust the testing process to his or her schedule and disposition. Hand-in-hand with that was the fact that all the children were tested in their homes, which required that the experimenter would make home visits. This proved to be very time-consuming, since the children comprising the sample came from different geographical areas of Puerto Rico.

Since each home was a different testing context, this may have constituted a changing variable affecting the general results of the different scales that were used. Certainly, a controlled office atmosphere can provide more consistency in the testing process itself.

The relative small sample size used in this study limits the generalizability of the results, and it also precluded the inclusion of additional variables in the regression equations. In addition, variables like birth order, age, parent education, and civil status could not be analyzed due to the small sample size. As Poulsen (2000) suggested in his study, it would have been preferable to use an experimenter who was blind to the experimental hypotheses. This would have controlled for experimenter-expectancy effects. The fact that this study design utilized procedures requiring specialized training, like hypnosis, presents an additional challenge in this type of research.

## Suggestions for Future Research

Following are several recommendations to address the challenges of future studies of this kind.

Since an important finding of this study was that the hypnotic induction portion of the SHCS-C produced very little increase in suggestibility, it may be profitable for future research to use suggestibility scales that do not require hypnotic inductions. For example, the Creative Imagination Scale (CIS; Wilson & Barber, 1978) was developed to meet the need for a non-authoritarian scale that can be given with or without induction.

Another important finding from this research was that the SHCS-C may underestimate hypnotizability. With more difficult items on the scale, as Zeltzer and LeBaron (1984) included in their revision, some individuals may show greater change scores.

Central to the use of suggestibility scales in this first study with Spanish-speaking children is the issue of cultural differences and translation. Although the results of this study produced mean scores that were similar to those of English-speaking subjects (Poulsen, 2000), future research to establish Spanish norms for the SHCS-C should be considered extremely important. Contrasting this study with future studies of the Spanish version of the SHCS-C would yield more reliable data concerning the use of this suggestibility scale cross-culturally. The same is true for the other scales used in this study: the Fantasy Questionnaire (LeBaron & Zeltzer, 1998), the Children's Fantasy Inventory (Absorption and Vividness Scale; Rosenfeld, Huesmann, Eron, & Torney-Purta, 1982) and the Child Dissociative Checklist (Putnam, Helmers, 7 Trickett, 1993).

Each of these scales was carefully translated into Spanish. Nevertheless, attention to culturally-sensitive norms for each one would render important data on their use across varying cultural contexts and, more specifically, with native Spanish-speaking populations.

Future research could take into account the measurement of parental expectancies about their children, as well as the children's owns expectancies, and their relationship and impact on suggestibility. This could add to the interpersonal context of imaginative suggestibility, with and without hypnosis, between parents and their children, as mentioned by some researchers and clinicians in the field. (Lankton & Lankton, 1983; Olness and Kohen, 1996; Gardner, 1984).

Continuing exploration of the role of attitudes and response expectancies affecting suggestibility in children will be an exceedingly important area for future research. At present, this is the only study that explores some aspects of parental attitudes towards children's suggestibility. However, research in the area of child attitudes, their specific response expectancies, and context effects will be an additional important dimension to explore.

## APPENDIX A

# CONSENT FOR PARTICIPATION LETTER

Dear Parent (s):

You and your child are invited to participate in a research study. Attached to this letter is a *Letter of Consent for Participation,* which describes the study. Please read and sing this form to agree to your and your child's participation. A short *Parent Questionnaire* is also included which needs to be completed. Please return these forms to me in person or mail them in the self- addressed envelope enclosed. There is no cost for participating in this study, and children who participate will receive a coupon to eat at a fast food restaurant as an appreciation gesture for their time and effort.

If you have any questions, please do not hesitate to contact Antonio Bustillo, the primary researcher of this study, at (787) 751-6936.

Thanks for your interest and participation.

# CONSENT FOR PARTICIPATION

You and your child are invited to take part in a research study for a doctoral dissertation from the University of Massachusetts, in Amherst. If you choose to participate in this study please keep in mind that: (a) taking part in this study is entirely voluntary; (b) you and your child's identity will remain anonymous through the study; (c)while no personal gain will result from taking part in the study, but knowledge may be gained that will benefit others; and (d) you and your child may withdraw from the study at any time. The nature of this study, the risks, inconveniences, and other pertinent information about the study are discussed below. I will be glad to discuss with you any questions you might have about this study.

The purpose of this research is two fold: (1) to see how well children can imagine things that are suggested to them and; (2) to see how the parent's expectations regarding their children responses might influence their capacity to imagine. We are particularly interested in learning how psychologists might provide better psychological treatment for children by better understanding and using their natural tendency towards fantasy and imagination.

In this study, the Stanford Hypnotic Clinical Scale for Children will be used to see how hypnosis might improve a child's ability to use his or her imagination. The Stanford scale is a test that psychologists and other mental health professionals use to see how responsive a child would be for hypnotherapy. The test consists of seven exercises that are read verbatim to the child, and create a brief experience of hypnosis. Some exercises ask the child to imagine physical sensations, such as his or her arm getting heavy (as if holding a heavy rock); other exercises ask the child to imaging seeing something, like watching a television program. The Stanford scale will be given to each child twice. The second time is given, the child will first be asked to focus carefully and be given time to relax. Each time prior to the administration of the scale, one of the parents will be given a scale to rate their expectancy of their children's responses to each of the seven task of the Stanford scale.

Many children and adults approach hypnosis with a great deal of misinformation. Some believe that they may be put to sleep or, as commonly depicted on television, be "put into a trance" and then be under the absolute control of the "hypnotist". In fact, there is no loss of control when one is experiencing hypnosis whether one is and adult or a child. Hypnosis will not cause your child to say something nor do anything that violates his or her moral and ethical beliefs. Contrary to what is often portrayed in the media, an individual experiencing hypnosis will not say things that are embarrassing nor do things that the individual would later regret.

Research in hypnosis indicates that there are no risks for the participants in hypnosis research, and people who participate in it overwhelmingly report it to be a pleasant and relaxing experience. We will not ask your child to do anything that would be uncomfortable and embarassing to him/her, nor we will ask your child to reveal anything of personal nature. We will simply ask your child to respond to a series of suggestions (e.g. making one's arm feel heavy, raising one's arm, etc.) and score the response given. Finally, here is no risk that your child will "stay in a trance" following the exercises. Furthermore, you will accompany him or her through the whole procedure.

The study consist of the following procedures:

(1) The expectancy scale will be given to the parent before each administration of the Stanford Hypnotic Clinical Scale for Children (SHCSC).

(2) The SHCSC will be given to each child by the principal researcher. These exercises should take about 40 minutes, and most children fin this quite enjoyable.

(3) The parents will be asked to complete a short questionnaire. Most of the questions focus on the child's current and past fantasy behavior, such as imaginary playmates and reading/television preferences. This should take approximately 15 minutes and can be completed at home, if desired.

(4) The child will be given two short questionnaires in interview format. The questionnaires focus on the child's current and past fantasy behavior, such as reading/television preferences and daydreaming behavior. This will take approximately 15 minutes.

Participation in this study is entirely voluntary and anonymous. You and your child may choose not to participate in this study. While it is hoped that all items from the questionnaires will be completed, you are free to leave items blank if you wish. If at any time you or your child wish to withdraw from the study, you may do so. You may also review any of your responses to the questionnaires or your child's responses to the suggestibility exercises.

If you have any questions about this study, or concerning your child's rights as a research subject, please contact Antonio J. Bustillo at (787) 751-6936. You will not give up any of your or your child's legal rights by signing this form.

## SIGNATURES

Upon consideration of the possible benefits and risks of the study outlined, I voluntarily agree to participate and allow the participation of

_____ in this study. My questions regarding participation in this study have been answered and I fully understood the explanation.

I give permission for the information gathered in this study to be released to the researcher with the understanding that it may be published for scientific purposes but that my child's and my own identity and other identifying information will not be publicly revealed by the researcher without my written consent. I acknowledge receipt of a copy of this consent document.

_____ _____

Child Date

_____ _____

Parent/Guardian Date

_____ _____

Witness Date

## CARTA DE CONSENTIMIENTO DE PARTICIPACION

Estimados/as padres y madres:

Usted y su hijo/a están invitados/as a participar en una investigación. Adjunto una *Carta de Consentimiento de Participación,* que describe el estudio en cuestión. Se incluye también un breve *Cuestionario para padres y madres* que ha de ser completado. Puede devolverlos a la mano o enviármelos a vuelta de correo en el sobre pre-dirigido que se incluye. El participar en esta investigación no implica costo alguno y los/as niños/as que participen recibirán un certificado de Mc Donald's para comer, como un gesto de agradecimiento por el tiempo y el esfuerzo brindados. También se ofrecerán talleres gratuitos sobre técnicas para el manejo de estrés a los padre/madres y niños/as que participaron en el estudio.

Si tiene alguna pregunta, por favor, no deje de comunicarse con Antonio Bustillo, el investigador principal de este estudio al (787) 751-6936 o Emilio Cortés (en Ponce) al 787-531-4333.

Gracias por su participación.

p.s. Para conveniencia de los/as participantes, las escalas pueden ser administradas en el hogar de los/as mismo/as.

## ***CONSENTIMIENTO DE PARTICIPACION***

Usted y su niño/a están invitados a participar en una investigación para una disertación doctoral de la Universidad de Massachusetts, en Amherst. Es importante que lea y entienda los principios generales que aplicarán a todos los que participen en la misma:

(a) el tomar parte en esta investigación es totalmente voluntario,

(b) su identidad y la de su hijo/a permanecerán anónimas durante toda la investigación,

(c) el tomar parte en esta investigación no produce lucro personal alguno, pero el conocimiento que se obtenga de la misma podría ayudar a otros/as; y

(d) usted y su hijo/a podrán retirarse de la investigación en cualquier momento que lo deseen.

A continuación se discute la naturaleza de esta investigación, los riesgos e inconvenientes, así como otra información pertinente sobre la misma. Con gusto discutiré con usted cualquier duda o pregunta que tenga al respecto.

Esta investigación tiene dos propósitos principales: (1) el observar cuán bien pueden los niños/as imaginar cosas que le son sugeridas y (2) ver de que modo las expectativas de los/as padres/madres con respecto a cómo responden sus hijos/as pueden influir en su capacidad de imaginar. Estamos particularmente interesados en aprender cómo los psicólogos/as podríamos proveer mejores servicios psicológicos a los/as niños/as, teniendo un mejor entendimiento y usando su tendencia natural hacia la fantasía y la imaginación.

En esta investigación se utilizará la Escala de Hipnosis Clínica Stanford para Niños/as para ver cómo la hipnosis podría mejorar la habilidad de un/a niño/a para usar su imaginación. La escala Stanford es una prueba que los/as psicólogos/as y otros profesionales de la salud mental utilizan para ver cuán sensible es un/a niño/a a hipnosis. La prueba consiste en siete ejercicios que se leen literalmente al niño/a, y que crean una breve experiencia de hipnosis. Algunos ejercicios piden que el/la niño/a imagine sensaciones físicas, tal como ir sintiendo su brazo pesado (como si estuviera sosteniendo una roca en la mano); otros ejercicios piden al niño/a que imagine ver cosas, como mirar

un programa de televisión. La escala Stanford será administrada dos (2) veces a cada niño/a. En la segunda ocasión, se pedirá primero al niño/a que enfoque cuidadosamente, y se le dará tiempo para que se relaje. Previo a cada administración de la escala, se le administrará al padre/madre (presente) una escala para evaluar la expectativa que éste/a tenga de la respuesta de su hijo/a para cada uno de los siete ejercicios de la escala Stanford.

Muchos niños/as y adultos tienen muchas ideas erróneas preconcebidas sobre la hipnosis. Algunos creen que estando en hipnosis, se les puede poner a dormir, o "en un trance" y pueden estar bajo el control absoluto del "hipnotista", como se presenta comúnmente en televisión. De hecho, no hay pérdida del control cuando uno/a experimenta hipnosis. La hipnosis no causará que su hijo/a diga algo o haga algo que viole sus creencias éticas y su moral.

Los estudios con hipnosis indican que no hay riesgos para los/as participantes en la investigación con hipnosis, y aquellos/as que participan en ello reportan de forma abrumadora que la experiencia es placentera y relajante. Nosotros no le pediremos a su hijo/a que haga nada que pueda ser incómodo y vergonzoso, como tampoco que él/ella revele información de naturaleza personal. Simplemente pediremos a su hijo/a que responda a una serie de sugerencias (p.ej. hacer que su brazo se sienta pesado, levantar el brazo, etc.) y anotaremos la respuesta dada. Por último, es importante mencionar que no existe el riesgo de que su hijo/a se "quede en un trance" luego de los ejercicios. Además, usted acompañará a su hijo/a en todo momento durante el procedimiento.

La investigación consiste en el siguiente proceso:

(1) La escala de expectativa administrará a cada padre/madre antes de cada administración de la Escala de Hipnosis Clínica Stanford para Niños/as (EHCSN).

(2) La EHCSN será administrada a cada niño/a por el principal investigador. Estos ejercicios deberán tomar alrededor de 40 minutos, y la mayoría de los/as niños/as disfrutan esta experiencia.

(3) Los/as padres/madres completarán un breve cuestionario. La mayoría de las preguntas enfatizan en la conducta fantasiosa del niño/a en el presente y en el pasado, como lo es lo relacionado a los amigos imaginarios, y tambien las preferencias en leer o mirar televisión. Esto tomará 15 minutos aproximadamente, y si lo desea, puede completarlo en la casa.

(4) Se administrará al niño/a dos (2) cuestionarios en formato de entrevista. Nuevamente, los cuestionarios auscultan la conducta fantasiosa del niño/a del presente y del pasado, tales como el soñar despierto o las preferencias al leer o ver televisión.

La participación en esta investigación es totalmente voluntaria y de carácter anónimo. Usted y su niño/a pueden optar por no participar en la misma. Aunque se espera que todas las preguntas de los cuestionarios sean contestadas, usted está en libertad de dejar preguntas sin contestar, si así lo desea. Su niño/a puede retirarse de la investigación en cualquier momento que usted lo desee. También puede revisar cualesquiera de las respuestas de los cuestionarios, tanto las suyas como las de su hijo/a si así lo desea.

Si tiene alguna pregunta acerca de esta investigación, o en lo concerniente a los derechos de su hijo/a como sujeto de investigación, por favor comuníquese con Antonio Bustillo al (787) 751-6936. Es importante mencionar que al firmar este consentimiento usted no renuncia a ningún derecho legal tanto suyo como de su hijo/a.

## ***FIRMAS***

Luego de considerar los posibles beneficios de esta investigación, yo acepto voluntariamente participar en la misma, al igual que autorizo la participación de _____ en esta investigación. Mis dudas y preguntas sobre esta investigación han sido contestadas y entendí las respuestas a cabalidad.

Autorizo también que el investigador obtenga información de esta investigación con el entendimiento de que la misma podría ser publicada para fines científicos, y que mi identidad y la de mi hijo/a, y cualquier otra información que nos identifique no serán públicamente reveladas sin mi consentimiento escrito. Acuso recibo de una copia de este documento.

_____ _____

Niño/a Fecha

_____ _____

Padre/Madre o Guardián Fecha

_____ _____

Testigo Fecha

# APPENDIX B

# CARTA DE ACUERDO PARA PARTICIPACION

## ***ESTUDIO SOBRE IMAGINACION***

Certifico que Antonio Bustillo me explicó lo relacionado a esta investigación y entiendo lo que ocurrirá en la misma. He hecho las preguntas que he deseado con respecto al proceso, y las mismas han sido contestadas. Soy consciente de que puedo abandonar esta investigació en cualquier momento con sólo decir a mis padres o a Antonio Bustillo que no quiero participar en el estudio.

Estoy de acuerdo en participar en esta invesigación.

_____ _____

**Niño/a** **Edad**

Esta carta ha sido leída al niño/a antes mencionado/a, y él/ella parece haber entendido la misma.

_____

Persona que obtuvo el consentimiento

## APPENDIX C

## CHILDREN'S FANTASY INVENTORY

## ABSORPTION AND VIVIDNESS SCALES

**For each item score 2 = "a lot", 1= "a little" and 0 = "no"**

**2 1 0** 1. Do you have a special daydream that you like to think about over and over?

**2 1 0** 2. When you are by yourself, do you like to sit and just be very quiet?

**2 1 0** 3. Do you keep right on playing or reading, even when its noisy in the room?

**2 1 0** 4. Do you find that even if you try real hard to pay attention to what you're doing or to your teacher, that you sometimes start to think of something else?

**2 1 0** 5. Do your daydreams sometimes seem so real to you that you almost forget it is just pretend and really think that it happened?

**2 1 0** 6. Do you have daydreams about how the worldwill be and what you are going to be many years from now when you're all grown up?

**2 1 0** 7. Do the people and things that you daydream about sometimes seem so real that you think you can almost see or hear them in front of you?

**2 1 0** 8. When you play pretended games, do you feel like you can really see the pretend places and pleople in the room with you?

**2 1 0** 9. Do you play pretend games about things that don't ever really happen in real life?

**2 1 0** 10. Sometimes when you play pretend things, do you feel so happy that you don't ever want the game to end?

**2 1 0** 11. When you are playing checkers or cards or other games like that, do your friends have to tell you that it's your turn because you were thinking about something else?

## INVENTARIO DE FANTASIA EN LOS NIÑO/AS
## ESCALA DE ABSORCION E INTENSIDAD: ESPANOL

Para cada pregunta, **2 = "mucho "**, **1=** si es **"un poco "**, y **0 = " no "**

**2 1 0** 1. ¿ Tienes algún sueño especial en el que piensas una y otra vez mientras estas despierto/a?

**2 1 0** 2. ¿ Cuando estás sólo/a contigo, te gusta sentarte y estar bien callado/a?

**2 1 0** 3. ¿ Puedes seguir leyendo o jugando en una habitación aún cuando hay muchos ruidos?

**2 1 0** 4. ¿Te ocurre que a veces empiezas a pensar en otra cosa, aunque trates con fuerza de prestar atención a lo que estás haciendo o a tu maestro?

**2 1 0** 5. ¿Cuando sueñas despierto/a, es a veces tan real que casi se te olvida que que es de mentira, y piensas que ocurrió de verdad?

**2 1 0** 6. ¿Sueñas despierto/a sobre cómo será el fin del mundo y cómo serás dentro de muchos años, cuando seas mayor?

**2 1 0** 7. ¿Cuando sueñas despierto/a, parecen tan reales las personas y cosas que

imaginas que casi puedes verlas y escucharlas como si estuvieran delante de ti?

**2 1 0** 8. ¿Cuando juegas a juegos de imaginación sientes que realmente puedes ver frente a ti a las personas y lugares que te inventas?

**2 1 0** 9. ¿Te gusta jugar juegos imaginarios en los que fantaseas sobre cosas que nunca pasan en la vida real?

**2 1 0** 10. ¿ A veces, cuando juegas a cosas imaginarias, te sientes tan feliz que no quieres que se termine el juego?

**2 1 0** 11.¿ Cuando juegas a las cartas, damas u otros juegos parecidos, te tienen que decir amigos/a que es tu turno porque estabas pensando en otra cosa?

**2 1 0** 12. ¿Sientes a veces que no quieres pensar en nada y deseas que alguien te cuente una historia o encender la TV?

## APPENDIX D

## THE FANTASY QUESTIONNAIRE

1. What were your favorite games or activities?

2. What games or activities did you like best when you were all alones? Did youe ever Think things up?

3. What kinds of games or other things did you like to do with your parents?

4. Did your parents ever read to you or tell you stories?

5. Did you ever see pictures or make believe things in your head?

6. Did you ever have a make-believe friend, like a toy or a make-believe person you talkded to?

7. Did you believe in magic?

## EL CUESTIONARIO DE FANTASIA: ESPANOL

1. ¿Cuales eran tus juegos o actividades favoritas?

2. ¿ Qué juegos o actividades te gustaban más cuando estabas sólo/a? ¿Alguna vez los inventaste tú mismo/a?

3 ¿Qué tipo de juegos u otras cosas te gusta hacer con tus padres?

4. ¿Te leían o contaban historias tus padres?

5. ¿Alguna vez viste fotos en tu mente o creíste que eran reales las cosas que sólo estaban en tu cabeza?

6. ¿Alguna vez has tenido un amigo inventado, como un juguete o una persona que no existía a quien le hablaste?

7. ¿Tú crees en la magia? (puntúese positivo si el/a niño/a indica creer en magia).

## APPENDIX E

## CHILD DISSOCIATIVE CHECKLIST

Frank W. Putnam, M.D.
Unit on Dissociative Disorders, LDP, NIMH

**Date:___ Age:___ Sex: M F** **Identification _____**

Below is a list of behaviors that describe children. For each item that describes your child **NOW** or **WITHIN THE PAST 12 MONTHS**, please circle **2** if the item is **VERY TRUE** of your child. Circle **1** is the item is **SOMEWHAT** or **SOMETIMES TRUE** of your child. If the item is **NOT TRUE** of your child, circle **0**.

**0 1 2** 1. Child does not remember or denies traumatic or painful experiences that are known to have ocurred.

**0 1 2** 2. Child goes into a daze or trance-like state at times or often apears "spaced-out". Teachers may report that he or she 'daydrems' frequently in school.

**0 1 2** 3. Child shows rapid changes in personality. He or she may go from being shy to being outgoing, from feminine to masculine, from timid to aggressive.

**0 1 2** 4. Child is unusually forgetful or confused about things that he or she should know, e.g. may forget the names of friends, teachers or other important people, loses possessions or gets lost easily.

**0 1 2** 5. Child has a very poor sense of time. He or she loses track of time, may think that it is morning when it is actually afternoon, gets confused about what day it is, or becomes confused about when something happened.

**0 1 2** 6. Child shows marked day-to-day or even hour-to-hour variations in his or her skills, knowledge, food preferences, athletic abilities, e.g. changes in handwriting, memory for previously learned information such as multiplication tables, spelling, use of tools or artistic ability.

**0 1 2** 7. Child shows rapid regressions in age-level of behavior, e.g. a twelve year old starts to use baby-talk, sucks thumb or draws like a four year-old.

**0 1 2** 8. Child has a difficult time learning from experience, e.g. explanations, normal discipline or punishment do not change his or her behavior.

) 1 2 9. Child continues to lie or deny misbehavior even when the evidence is obvious.

) 1 2 10. Child refers to him or herself in the third person (e.g. as she or her) when talking about self, or at times **insists** on being called by a different name. He or she may also claim that things that he or she did actually happened to another person.

) 1 2 11. Child has rapidly changing phyiscal complaints such as headache or upset stomach. For example, he or she may complain of a headache one minute and seem to forget alla about it the next.

) 1 2 12. Child is unusually sexually precocious and may attempt age-inappropriate sexual behavior with other children or adults.

) 1 2 13. Child suffers from unexplained injuries or may even deliberately injure self at times.

) 1 2 14. Child reports hearing voices that talk to him or her. The voices may be friendly or angry and may come from 'imaginary companions' or sound like the voices of parents, friends or teachers.

) 1 2 15. Child has a vivid imaginary companion or companions. Child may insist that the imaginary companion(s) is responsible for things that he or she has done.

) 1 2 16. Child has intense outburst of anger, often without apparent cause and may display unusual physical strengh during thes episodes.

) 1 2 17. Child sleepwalks frequently.

) 1 2 18. Child has unusual nightime experiences, e.g. may report seing "ghosts" or that things happen at night that he or she can't account for (e.g. broken toys, unexplained injuries).

) 1 2 19. Child frequently talks to him or herself, may use different voice or argue with self at times.

) 1 2 20. Child has two or more distinct and separate personalities that take control over the chid's behavior.

## ESCALA INFANTIL DE DISOCIACION: ESPANOL

Frank W. Putnam, M.D. (1990)

Fecha:_____ Edad: ____ Sexo: M F Identificación _____

A continuación hay una lista de comportamientos que describen a los/las niño/as. Para cada ítem que describa a su niño/a tal como se comporta **EN LA ACTUALIDAD** o como lo ha hecho **DURANTE LOS ULTIMOS 12 MESES**, por favor, trace un círculo alrededor del **2** si el ítem es **TOTALMENTE CIERTO** con respecto a su niño/a. Redondee el **1** si sólo describe **MODERADAMENTE CIERTO** lo que hace su niño/a. Trace un círculo alrededor del **0** si lo que el ítem describe **NO ES CIERTO** con respecto a su niño/a.

**0 1 2** 1. El/la niño/a no recuerda o niega experiencias traumáticas o dolorosas que se sabe han ocurrido.

**0 1 2** 2. El/la niño/a entra en un estado de aturdimiento o de trance pareciendo estar "espaceao" (ralentizado). Los maestros indican que el/la niño/a "sueña despierto" en la escuela.

**0 1 2** 3. El/la niño/a cambia rápidamente de personalidad: de tímido a extravertido, de femenino a masculino, o de sumiso a agresivo

**0 1 2** 4. El/la niño/a es excepcionalmente olvidadizo o se confunde sobre cosas que debería saber. Por ejemplo, puede que olvide los nombres de los amigos, maestros u otras personas importantes, o que se le pierdan pertenencias o se extravíe él mismo con facilidad

**0 1 2** 5. El/a niño/a tiene un pobre sentido del tiempo. Pierde la noción del tiempo, pudiendo pensar que es por la mañana cuando realmente es por la tarde, se confunde sobre qué día es sobre algo que ocurrió.

**0 1 2** 6. El/la niño/a demuestra variaciones marcadas de día a día, o incluso de hora a hora sus destrezas, conocimientos, preferencias de comida, habilidades atléticas. Por ejemplo, cambios en la mano con que escribe, o cambios en el recuerdo de de información ya aprendida, como las tablas de multiplicar, el deletreo, uso de herramientas o habilidades artísticas.

**0 1 2** 7. El/a niño/a muestra una regresión rápida en las conductas apropiada para su edad. Por ejemplo, un niño/a de doce años que comienza a hablar como bebé, se chupa el dedo, o dibuja como uno de cuatro años.

**0 1 2** 8. El/a niño/a tiene dificultad para aprender de la experiencia. Por ejemplo, el que las explicaciones, la disciplina normal o el castigo no cambien su conducta.

**0 1 2** 9. El niño continúa mintiendo o a negando su falta aún cuando la evidencia es obvia.

**0 1 2** 10. El/a niño/a habla de sí mismo/a en tercera persona (por ejemplo, como él o ella) cuando habla de sí mismo/a, o insiste en que se le llame por un nombre diferente. El o ella también puede indicar que le ocurrieron cosas que realmente le pasaron a otra persona.

**0 1 2** 11. El/la niño/a se queja de dolencias físicas que desaparecen rápidamente, como dolores de cabe za u estómago descompuesto. Por ejemplo, el o ella puede quejarse de dolor de cabeza un minuto y al próximo, parecer olvidarlo por completo.

**0 1 2** 12. El/la niño/a es sexualmente muy precoz y puede mostrar conductas sexuales inapropiada para su edad con otros niños o con adultos.

**0 1 2** 13. El/la niño/a sufre de lesiones inexplicables o puede que en ocasiones se lesione así mismo sin razón aparente.

**0 1 2** 14. El/la niño/a dice que escucha voces que le hablan. Las voces pueden ser amigables o estar enfadadas, y pueden venir de "acompañantes imaginarios", o puede que suenen como las voces de los padres, amigos o maestros.

**0 1 2** 15. El/la niño/a tiene un acompañante o acompañantes imaginarios. Puede que él/ella insista en que el acompañante (s) imaginario/s es el responsable por cosas que ha hecho el propio niño/a.

**0 1 2** 16. El/la niño/a tiene explosiones intensas de corage (rabia), sin causa aparente. Puede que despliegue una fuerza física anormal durante estos episodios.

**0 1 2** 17. El/la niño/a camina dormido (sonámbulo).

**0 1 2** 18. El/la niño/a tiene experiencias inusuales a la hora de dormir. Por ejemplo, puede indicar que ve "fantasmas" o que ocurren cosas en la noche que no puede explicar ( juguetes rotos, lesiones sin explicación).

**0 1 2** 19. El/la niño/a se habla con frecuencia, pudiendo usar una voz diferente e incluso en ocasiones discute consigo mismo/a.

**0 1 2** 20. El/la niño/a tiene dos o más personalidades distintas y separadas que toman control sobre su conducta.

## APPENDIX F

## ESCALA HIPNOTICA-CLINICA STANFORD PARA NINOS FORMA ESTÁNDAR (EDADES 6-16): ESPANOL

Discusion de ideas preconcebidas que el niño/a o padres puedan tener sobre la hipnosis deben precedir la administracion de la escala. Asegurese de que el significado de la palabra "relajarse" sea entendida. Si es necesario, explicale en terminos de "dejarse llevar" como cuando el hipnoterapeuta sostiene la muñeca del niño/a y la deja caer gentilmente, o "el sentirse mongo como una muñeca de trapo".

**Inducción**

Hoy voy a ayudarte a aprender algunas cosas interesantes sobre la imaginación. La mayoría de la gente dicen que son divertidas (fascinantes). Voy a pedirte que pienses en varias cosas diferentes, y veremos como funciona tu imaginación. Algunas personas encuentran que algunas cosas son más fáciles de imaginar que otras. Queremos descubrir cuales son las mas interesantes para tí. Escúchame cuidadosamente, y vamos a ver que ocurre. Sólo ponte cómodo/a en esa silla (cama), y vamos a imaginarnos algunas cosas ahora. Por favor, cierra tus ojos para que puedas imaginarlas mejor…Ahora me gustaria que te imaginaras a tí flotando en una piscina de agua tibia… ¿Que te parece? (¿cómo es?) Y ahora, ¿puedes imaginarte flotando en el aire en una nuve suave?…¿Cómo es?

Esta bien- abre tus ojos…Ahora quiero enseñarte cómo puedes sentirte completamente relajado y cómodo, porque eso también hace más fácil el imaginarse cosas,

Voy a dibujar una carita en mi pulgar…Aquí está…*Hypnoterapeuta dibuja la cara en su propio pulgar con un bolígrafo de tinta roja.* Pongamos una en tu pulgar. ¿Quieres hacerlo o lo hago yo? *Hipnoterapeuta o el niño/a lo hacen.* Buena cara! Ahora, por favor sostén tu mano frente a tí de esta forma- *asista al niño/a para que la mano esté al frente, con la uña del pulgar hacia su cara, sin que el codo descanse en nada-* y mira la carita (uña del pulgar), trata de pensar sólo en las cosas de que digo, y deja que tu cuerpo se relaje completamente…Deja que todo tu cuerpo se siente suelto, flexible y relajado… Relajado completamente…tan solo deja que se relajen todos los musculos de tu cuerpo…relajado completamente…relajate de igual forma que cuando estabas imaginandote flotando en la piscina de agua, o flotando en la nube…Siente tu cuerpo relajarse más y más…más y más relajado…Tus parpados, también se relajan. Empiezan a sentirse pesados. Mientras continuas mirando la cara (uña del pulgar), tus ojos se sienten más y más pesados…Tus ojos estan comenzando a parpadear un poco, y esa es una señal bien buena. Eso significa que te estas relajando muy bien. Sólo sigue mirando la cara (uña del pulgar), tus ojos se sienten más y más pesados…tus ojos estan empezando a parpadear un poco, y esa es una buen señal. Eso significa que te estas relando muy bien. Sólo mantente mirando la cara (uña del pulgar) y escuchando mi voz… Ya tus ojos se sienten pesados.

Bien pronto se sentirán tan pesados que empezaran a cerrarse solos…Deja que se cierren cuando sientas que lo deseas. Y cuando se cierren, deja que se mantengan cerrados…Aún ahora, y todo tu cuerpo se siente tan bien (chévere), tan cómodo, completamente relajado…

*Si el niño/a en cualquier momento demuestra evidencia convincente de inabilidad para relajarse, o indisponibilidad de dejar que se cierren los ojos o mantenerlos cerrados, vaya a la Forma Modificada.*

Ahora voy a contar del uno al diez, y sentiras tu cuerpo aún más relajado…seguirás relajándote mientras escuchas el conteo…uno…más y más relajado…tan buena sensación…dos…tres…más y más relajado todo el tiempo, sintiéndote tan bien…cuatro…cinco…seis…aún más relajado…y tus ojos se sienten más pesados, más pesados… Se siente tan bien el dejarse ir y relajarse completamente…siete…ocho…nueve…ahora BIEN relajado…diez…

*Si el niño/a sigue sosteniendo la mano arriba:* también deja que tu mano se relaje completamente….Sólo deja que se cierren tus ojos y mantenlos cerrados mientras me escuchas…

*Si los ojos no se han cerrrado:* Por favor, deja que tus ojos se cierren ahora, y sólo relajate completamente. Solo deja tus ojos cerrados y mantenlos cerrados mientras me escuchas…

*Para todos los niño/as*: Y ahora, mientras continuamos, sera bien fácil para tí escucharme porque estás bien relajado y cómodo. Si puedes mantener tus ojos cerrados puedes imaginar mejor algunas cosas, así que porque no los mantienes cerrados. Podrás mantenerte relajado y hablarme cuando te lo pida…Te sientes muy bien…Solo mantente escuchando lo que te digo y piensa en las cosas que te sugiero. Entonces, solo deja que pase lo que descubras que este pasando…Solo deja que las cosas ocurran por si mismas.

*Si los ojos se abren en cualquier momento, pidale gentilmente al niño/a que los cierre:* Porque así es más fácil la imaginación.

**1. Mano descendiendo (Hand Lowering)**

Por favor, extiende tu brazo derecho (izquierdo) hacia delante frente a tí, con la palma hacia arrriba. *Asista si es necesario*. Imagínate que estás sosteniendo algo pesado en tu mano, como una piedra pesada. Algo bien pesado. Moldea tus dedos alrededor de la piedra pesada en tu mano. ¿Cómo se siente?…Eso es…Ahora piensa que tu brazo y mano se sienten más y más pesados, como si la piedra estuviera empujando hacia abajo…más y más hacia abajo…y mientras se pone más y más pesado, el brazo y la mano comienzan a moverse hacia abajo…abajo… más y más pesado…moviendose… abajo, abajo, abajo…moviendose…moviendose…más y más abajo… más y más pesado…*Espere 10 segundos: note el alcance (extent) del movimiento.* Eso es. Ahora puedes parar de imaginarte que hay una piedra en tu mano, y deja que tu mano se relaje…Ya no esta pesada….

*Anotacion + si la mano desciende por lo menos 6 pulgadas al cabo de 10 segundos.*

## 2. Rigidez del Brazo (Arm Rigidity)

Ahora, por favor, sostén tu brazo izquierdo (derecho) estirado con los dedos estirados también...Eso es, tu brazo estirado hacia el frente tuyo, dedos estirados tambien...Piensa en como mantener(making) tu brazo tieso y estirado, bien, bien tieso...Imaginate (piensa) que eres un arbol, y que tu brazo es la rama fuerte de un arbol...tan tieso que no puedes doblarlo...Eso es...Ahora, mira cuan tieso esta tu brazo...Trata de doblarlo...Trata...Trata...*Espere 10 segundos.* Eso es...Ahora tu brazo ya no es la rama de un arbol. Ya no esta tieso...Solo dejalo que se vuelva a relajar...
*Anotacion + si el brazo se ha doblado menos de 2 pulgadas al cabo de 10 segundos.*

## 3 y 4. Halucinaciones Visuales y Auditivas (TV)

Es facil imaginarse lo que te voy a pedir si mantienes tus ojos cerrados.
Cual es tu programa de TV favorito? *Para el nino que no ve TV, substituya por pelicula de cine favorita y modifique las instrucciones apropiadamente. Anote la respuesta.*

Puedes mirar ese programa ahora mismo si lo deseas, y yo te dire como. Cuando cuente hasta tres, vas a ver una TV frente a ti, y puedes ver el programa de *(mencione el programa)*...¿Listo? Uno...dos...tres....¿lo ves?

*Si la respuesta es si*

¿Esta clara la imagen?...¿Es blanca y negra, es a colores? Que esta pasando? ¿Puedes escuchar el programa?...¿Esta lo suficientemente alto el sonido¿ ¿Que estas escuchando? *Fianalmente:* Se está acabando el programa Ahora...La TV está desapareciendo...Ya se *escucha,*
fue...muy bien.

*Si la respuesta es no*

Está bien... A veces toma un poquito de tiempo mientras te sale hacerlo... Sólo espera un poquito, pienso que empezarás a verlo bien pronto.*Espere 5 segundos.* Ahí está, ¿que ves ahora? ¿Que estas escuchando? *Si ve o*

*pregunte al igual que la columna izquierda.*

*Si los ojos estan abiertos*

Está bien. Olvídate del TV...haremos otra cosa...Sólo relájate y sigue escuchando mi voz....

*Visual: Anotación + si el niño/a vé un programa con suficientes detalles como para compararlo con ver un programa en la realidad.*
*Auditivo: Anotación + si el niño/a reporta escuchar palabras, efectos de sonido música, etc.*

## 5. Sueños

¿Tu sueñas por la noche cuando estas dormido? *Si el nino esta confundido, explique que un sueno es como ver que las cosas ocurren aun cuando estas dormido.* Me gustaria que pensaras sobre como te sientes cuando estas de noche a punto de dormirte, y que imgines que estas a punto de tener un sueno…Solo deja que un sueno llega a tu mente…un sueno como los que tienes cuando estas durmido…En un momento, cuando pare de hablar, tendras un sueno, un sueno bien placentero, igual que los suenos que tienes cuando estas dormido de noche…Esta llegando un sueno a tu mente ahora…*Espere 20 segundos.*

Se terminó el sueño ahora, y me gustaria que me hablaras de él. *Documente verbatim, indagando cuanto sea necesario con respecto a pensamientos e imagenes.* Esta bien. Puedes olbidar el sueno ahora y relajarte. Solo relajate completamente y deja que todo tu cuerpo se sienta bien…

*Anotacion + si el niño/a tiene una experiencia que se compare a un sueño, con alguna acción.*

## 6. Regresión en Edad

Ahora me gustaria que pensaras, iendo hacia atras en algun momento bien especial en tu vida cuando eras mas joven que en el presente. Algun momento el ano pasado, o quizas cuando eras mas joven que ese…viaje especial, quizas, o una fiesta de cumpleanos. Puedes pensar en alguna epoca como esa? Que ocurrio? *Documente el vento en question.* Muy bien…ahora quisiera que pensaras en esa epoca(tiempo)…Piensa en que eres mas joven y mas pequeno…En breve (o poco tiempo) vas a sentirte justo como te sentiste ese dia cuando (*especifique el evento)*. Voy a contar hasta el cinco, y a la cuenta de cinco, iras hacia atras y estaras en esa
situacion(evento)…uno…dos…tres…cuatro…cinco…Ahora estas ahi…Dime sosbre ello(o como es)…Donde estas?Que estas haciendo? Cuantos anos tienes? Mirate a ti mismo y dime como estas vestido. *Continue segun sea apropiado y documente las respuestas.*
Eso es…Ahora puedes parar de pensar en ese dia y regresar al dia de hoy, en este cuarto, con todo justo como estaba antes. Dime como fue el ir atras al dia (evento en question)…Fue como estar ahi o solo pensaste sobre eso? Cuan real fue? Se sentiste mas pequeno…Esta bien(o eso es)…Solo relajate completamente ahora…
*Anotacion+ si el nino provee respuestas apropiadas a las preguntas y reporta alguna experiencia de haber estado ahi.*

## 7. Respuestas Post-hipnóticas

Eso es…bien relajado…sintiendote tan bien, tan comodo…tan relajado…En un momento voy a pedirte que respires profundamente y que abras tus ojos sintiendote totalmente despierto, asi podremos hablar un poco sobre las cosas que hemos hecho hoy…Sin embargo, mientras hablamos, voy a aplaudir dos veces, asi-*demuestre-*. Cuando me escuches aplaudir, cerraras tus ojos inmediatamente y regresaras a volver a sentirte como

justo como te estas sintiendo ahora...completamente relajado...Te sorprendera lo facil que es dejar cerrar tus ojos, y dejar que todo tu cuerpo se relaje completamente otra vez, cuando escuches aplaudir...relajado y comodo, asi como estas ahora...Muy bien, entonces...ahora respira profundamente y abre tus ojos...Esta bien...Quizas quieras estirarte un poco, asi te sentiras alerta...Haz hecho un buen trabajo imaginandote estas cosas...Cual de las cosas que te pedi fue la mas divertida? *Luego de 20 segundos aproximadamente, aplauda. Anote respuesta.*
*Anotacion+ si el nino cierra los ojos y exhibe caracteristicas de relajacion.*
Te sientes relajado? Te sientes igual de relajado que antes, antes de que te pidiera que abras los ojos?...Eso es...Ahora voy a contar del cinco al uno, y cuando llegue al uno, abriras tus ojos y te sentiras otra vez bien despierto, y sabras que terminamos por hoy de imaginarnos cosas. Bien(okay), entonces...cinco...cuatro...tres...dos...uno...muy bien. *Recuerdele al nino sobre de eventos especificos asi que pueda recordar todas las sugestiones.* Ahora voy a volver a aplaudir, y esta vez no te hara sentirte sonoliento (o con sueno) y relajado. *Aplauda, anote respuesta, y asegurese de que el nino este completamente alerta.*

**Cierrre**

Lo hiciste muy bien hoy. ¿Qué fue lo más divertido de las cosas que te pedí que hicieras? Hay aluna otra cosa que quisieras hablarme?...Si no la hay, entonces ya terminamos.

**Forma de Anotaciones**

Nombre_____Fecha_____Puntuación Total_____

Edad_____Hipnoterapeuta_____

**SUMA DE ANOTACIONES**
(detalles en las paginas siguientes)

| | Puntuacion (+ o -) |
|---|---|
| 1. **Mano descendiendo** | (1)_____ |
| 2. **Rigidez del brazo** | (2)_____ |
| 3. **TV-Visual** | (3)_____ |
| 4. **TV-Auditivo** | (4)_____ |
| 5. **Sueños** | (5)_____ |
| 6. **Regresión en edad** | (6)_____ |
| 7. **Respuestas Post-hipnóticas** | (7)_____ |

Puntuación Total _____

Comentarios:

**1. Mano descendiendo**
Describa el movimiento:

Puntuacion

Anotacion + si el brazo y la mano descienden al menos 6 pulgadas al final de 10 segundos. (1) _____

**2. Rigidez del brazo**
Describa el movimiento:

Anotacion + si el brazo se dobla menos de 2 pulgadas al cabo de 10 segundos. (2) _____

**3 y 4. Alucinaciones visuales y auditivas (TV)**
Programa preferido:
(3) Visual
Lo puedes ver?
Esta clara la imagen?
Es blanco y negro o a color?
Que esta pasando? (detalles de la accion)

Anotacion + si el nino reporta ver una imagen similar a verlo en la actualidad (o en realidad). (3) _____

(4) Auditivo
Puedes escucharlo?
Esta suficientemente alto(el volumen)?
Sonidos reportados (palabras, efectos de sonido, musica, etc.):

Anotacion + si el niño reporta escuchar un sonido claramente. (4) _____

**5. Sueños**
Narrativa verbatim del sueño:

Anotación + si el niño/a tiene una experiencia comparable a un sueño, con alguna acción. Esto no incluye ideas vagas o fugaces o sentimientos que no esten acompanados de imagenes. (5) _____

6. **Regresion en edad**
   Evento en cuestion:
   Donde estas?
   Que estas haciendo?

   Que edad tienes?
   Como estas vestido?
   Mirate a ti mismo y dime como estas vestido.
   Como lucia (o te parecio) el estar ahi de regreso?

   Como era el estar ahi, o solo pensaste en eso?

   Te sentiste mas pequeno?
   Otro:

Anotacion + si el nino provee respuestas apropiadas y reporta alguna experiencia de estar ahi. (6) _____

7. **Respuestas post-hipnoticas**
   Respuesta al aplaudir:
   Cerro los ojos el nino?
   Parecia haberse relajado?
   Te sentiste relajado?
   Tan relajado como antes?
   Discussion de reactivos especificos:

Respuesta al aplaudir despues de removida la sugerencia:

Anotacion + si el niño cerro los ojos y se relajo en el aplauso inicial (7) _____

Puntuacion Total _____

## APPENDIX G

## RESPONSE EXPECTANCY SCALE

Antonio J. Bustillo, M.A., San Juan, PR

**Instructions**

Your child will be asked to response to some suggestions regarding the capacity to imagine different things like, visualizing or imagine a sound or a sensation.
You would be presented with a written description of each suggestion before your child, so you could rate the degree you expect your child to respond behaviorally and experientially.

**1. Hand lowering**

The child will be asked to hold right (or left) straight out in front of he/she at shoulder height with the palm of the hand up. Will be asked to imagine a heavy rock in the palm of the hand, and shape the fingers around the heavy rock. Will be asked to think as if the rock is becoming heavier and heavier while it push down the hand/arm, lowering down as it gets more heavy every time. After ten seconds of this instruction:

How low do you predict your child's hand will lower? (circle just one)

1 2 3 4 5

**1= Not at all** **5= Very low**

How heavy do you predict your child's arm would feel? (circle just one)

1_____2_____3_____4_____5

**1= Not at al** **5= Very heavy**

**2. Arm rigidity**

Your child will be asked to hold his/her left (right) arm straight out with the fingers straight out, and will be asked to make that arm very stiff and straight, very stiff, as if were a very straight and strong branch of a tree, so stiff that he/she will not be able to bend it even if she/he tries.

After 10 seconds of this instruction:

How likely it is that your child would bent the arm less than 2 inches?
(circle just one)

1_____2_____3_____4_____5

**1= Not at all** **5= Very likely**

How stiff do you think the arm would feel?

1_____2_____3_____4_____5

**1= Not at all** **5= Very stiff**

**3 and 4. Visual and Auditory Hallucinations (TV)**

The child will be asked (with eyes closed) to imagine his/her favorite TV program (or movie on theater), and will be asked to "see" it as real, clear as possible, while "listening" to it as if were watching the real TV (movie) show.
After five seconds:

How likely would you predict your child would "see" details of the TV show as if were the real one?

1_____2_____3_____4_____5

**1= Not at all** **5= Very much**

How real would you predict the child will "see" the TV show?

1_____2_____3_____4_____5

**1= Not at all** **5= Very real**

How likely it is that your child would report listening to words, sound effects or music?

1_____2_____3_____4_____5

**1= Not at all** **5= Very much**

How real do you predict your child would feel those sounds?

1_____2_____3_____4_____5

**1= Not at all** **5= Very real**

**5. Dreams**

Your child will be asked to imagine that he/she is about to have a dream just like when she/he is sleeping at night. She/he will be asked to let the dream come into his/her mind, and will have a dream when the experimenter stops talking. It would be a very nice dream that will come into the child's mind.
After 60 seconds have passed:

How likely it is that your child will have a dream?

1_____2_____3_____4_____5

**1= Not at all** **5= Very much**

How vivid do you predict the dream will be?

1_____2_____3_____4_____5

**1= Not at all** **5= Very much**

**6. Age regression**

The child will be asked to think about a happy event from his/her past. It could be a trip, a birthday party or something else. After slowly counting to 5, the experimenter would ask the child to think he/she is smaller (younger) and that is actually experiencing that happy/special event. The child will report on the experience as if it is actually happening.

How likely it is that your child would re-experience that happy event from the past?

1_____2_____3_____4_____5

**1= Not at all** **5= Very much**

To what degree do you think your child would feel that experience the same way he/she did in the past?

1_____2_____3_____4_____5

**1= Not at all** **5= Very much**

**Post-hypnotic responses**

In a state of relaxation, the child will be asked to breathe slowly and comfortably while opening his/her eyes to be fully awake, to be able to talk with the examiner. The child will be instructed to close his/her eyes and go to a nice and comfortable state of relaxation (similar to the one previous to the conversation) when the experimenter claps his hands during the conversation (20 seconds after awaking the child for the first time). The child will be able to close his/her eyes and relax comfortably just with the clapping of hands by the experimenter.
After the experimenter claps his hands:

How likely do you think it is that your child will close his/her eyes and develop a state of relaxation?

1_____2_____3_____4_____5

**1= Not at all** **5= Very much**

How relaxing do you predict your child will feel in that state?

1_____2_____3_____4_____5

**1= Not at all** **5= Very much**

**ESCALA DE EXPECTATIVA A LA RESPUESTA: ESPANOL**

*Antonio J. Bustillo, M.A., San Juan, PR*

***No. de Identificación*_____**

*Los padres/madres o encargados:*
*Sexo: M F Edad:_____ Estado civil:_____ Escolaridad:_____*
*Religión:_____*

***Instrucciones***

*Se le pedirá a su niño/a que responda a ciertas sugestiones relacionadas a la capacidad de imaginar diferentes cosas, como visualizar o imaginar un sonido o una sensación. Se le presentará a usted una descripción por escrito de cada una estas sugestiones antes que su niño/a, para que puntúe el grado en que espera en que su hijo/a responda con la conducta o experiencia sugerida.*

1. ***Descenso de la Mano***

*Se le pedirá al niño/a que estire hacia el frente su brazo derecho (izquierdo) al nivel del hombro y con la palma de la mano hacia arriba. Se le pedirá que imagine una piedra pesada en la palma de la mano, y que moldee los dedos alrededor de la piedra. Se le pedirá además que piense que la piedra es cada vez más y más pesada, y que presiona el brazo/mano hacia abajo, bajándolo a la vez que se torna más pesado según pasa el tiempo. Al cabo de 10 segundos de esta instrucción:*

¿ Cuanto predice usted que baje la mano/brazo de su niño/a? (circule sólo una)

*1_____2_____3_____4_____5*
**1= nada** **5= bien bajo**

¿Cuan pesado predice que sentirá su niño/a el brazo? (circule sólo una)

*1_____2_____3_____4_____5*
**1= nada** **5= bien pesado**

2. ***Rigidez del brazo***

*Se le pedirá a su niño/a que estire su brazo derecho (izquierdo) hacia el frente con los dedos estirados, y que mantenga su brazo bien rígido y estirado, bien rígido, como si fuera una rama de árbol tensa y fuerte, tan rígida que cuando trate, él/ella no podrá doblarla.*
*Luego de 10 segundos de esta instrucción:*

¿Que probabilidad hay de que su niño/a podrá doblar el brazo menos de 2 pulgadas?

*1*_____*2*_____*3*_____*4*_____*5*

**1= ninguna** **5= bien probable**

¿Cuán rígido (tieso) cree que él/ella sentirá el brazo?

*1*_____*2*_____*3*_____*4*_____*5*

**1= nada** **5= bien rígido**

*3. y 4.* ***Alucinaciones visuales y auditivas***

*Se le pedirá a su niño/a (con los ojos cerrados) que imagine su programa favorito de TV (o película en el cine), y se le pedirá que la "vea" tan clara y real como le sea posible, mientras "la escucha" como si estuviera realmente viendo el programa de TV.*
*Luego de 5 segundos:*

¿Cuál es su predicción de que su niño/a podrá "ver" los detalles del programa de TV como si fuera el verdadero?

*1*_____*2*_____*3*_____*4*_____*5*

**1= nada de probable** **5= bien probable**

¿Cuán real cree usted podrá el niño/a "ver" el programa de TV?

*1*_____*2*_____*3*_____*4*_____*5*

**1= nada** **5= bien real**

¿Cuán probable es que su niño/a indique escuchar los diálogos, música o efectos de sonido?

*1*_____*2*_____*3*_____*4*_____*5*

**1= nada** **5= bien probable**

¿ Cuán real predice usted que su niño/a sentirá esos sonidos?

*1*_____*2*_____*3*_____*4*_____*5*

**1= nada** **5= bien real**

*5.****Sueños***

*Se le pedirá a su niño/a que imagine que está a punto de tener un sueño, igual que cuando duerme en la noche. Se le pedirá que a él/ella que deje que el sueño venga a su mente, y que tendrá un sueño cuando el experimentador deje de hablar. Un sueño bien agradable vendrá a la mente de él/ella.*
*Luego de 60 segundos:*

¿Cuán probable es que su niño/a tenga el sueño?

*1*_____*2*_____*3*_____*4*_____*5*

**1= nada** **5= mucho**

¿Cuán vívido (real) predice que será el sueño?

*1*_____*2*_____*3*_____*4*_____*5*

**1= nada** **5= mucho**

*6.* ***Regresión de edad***

*Se le pedirá al niño/a piense en un evento felíz del pasado. Puede ser un viaje, una fiesta de cumpleaños, u otra situación. Luego de contar suavemente hasta 5, el experimentador le pedirá al niño/a que piense que es más joven y que realmente está experimentando ese evento especial/felíz. El niño/a indicará acerca de la experiencia como si estuviera ocurriendo al presente.*

¿Cuán probable es que su niño/a re-experimente ese felíz evento del pasado?

*1*_____*2*_____*3*_____*4*_____*5*

**1= nada** **5= mucho**

¿A qué punto cree que su niño/a sentirá la experiencia en la misma forma que lo hizo en el pasado

*1*_____*2*_____*3*_____*4*_____*5*

**1= nada** **5= mucho**

*7.* ***Respuesta Post-hipnótica***

*Mientras su niño/a se encuentra relajado/a, se le pedirá que respire lenta y confortablemente mientras se mantiene totalmente despierto, con sus ojos abiertos y hablando con el examinador. Se le indicará al niño/a que cierre sus ojos, y que se vaya a un estado de relajación agradable y confortable (similar al estado previo a la conversación) al examinador aplaudir dos veces durante la conversación (20 segundos luego de despertar al niño/a por primera vez). El/la niño/a será capaz de cerrar los ojos y relajarse confortablemente con tan sólo escuchar los aplausos del examinador. Luego de que el examinador aplauda (dé las 2 palmadas):*

¿Cuán probable será que su niño/a cierre los ojos y desarrolle un estado de relajación?

*1*_____*2*_____*3*_____*4*_____*5*

**1= nada** **5= mucho**

¿Cuán relajado/a cree usted que se sentirá su niño/a en ese estado?

*1*_____*2*_____*3*_____*4*_____*5*

**1= nada** **5= mucho**

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